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ABSTRACT

This packet contains the materials necessary for presentation of the first of ten modules which comprise a portion of the National Training and Development Service Urban Management Curriculum Development Project. This module introduces strategic planning which is a process for reducing the uncertainty under which systems operate. Its primary objective is to broaden the base for making public decisions that have long range implications. The packet includes (1) an instructor's manual which provides suggestions about the mechanical details upon which the success of the module depends, (2) a technical supplement which is an extension of and performs the same function as the instructor's manual, and (3) a student/participant manual which discusses basic concepts in local government planning. (Author/MK)

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STRATEGIC PLANNING

Instructor's Manual

Prepared by Robert C. Stuart

Module Number One
of
POLICY/PROGRAM ANALYSIS AND
EVALUATION TECHNIQUES Package VI

Developed by

CENTER FOR URBAN AND REGIONAL STUDIES
DIVISION OF ENVIRONMENTAL AND URBAN SYSTEMS
COLLEGE OF ARCHITECTURE AND URBAN STUDIES
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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Package VI

PART ONE: MODULE AND COURSE MECHANICS

This section of the Instructor's Manual has as its purpose provision of helpful suggestions on the many mechanical details on which success of the course depends. The suggestions focus on use of the module for a two-day short course for city and county managers, planners, department heads and others with an interest in strategic planning. However, the module can easily be adapted for use in longer courses, such as regular academic terms.

STRUCTURE OF THE MODULE AND COURSE

At its present state of development public strategic planning consists of a broad set of concepts from both corporate and public management experience, a set of techniques suitable for the requirements of strategic planning, and a limited set of illustrative examples. To effectively cover so broad and complex a subject as strategic planning for local government within a two-day short course required special organization of the learning materials, called the module. The module consists of four volumes, as follows:

1. The manual, Strategic Planning, covering the basic concepts in local government. It is designed to be read prior to the short course (optional), or to be used as a refresher and reference after the course, by the strategic planning practitioner. It also provides the course instructor with the main source of materials for the course lectures. These materials are especially designed as a basis for the scenario exercises of the course.

2. The Technical Supplement, which is an extension of the manual, and performs the same functions as just described for the manual. The Supplement contains the techniques that are particularly useful in strategic planning.

3. The Workbook, which has been purposefully designed for participant's use in the short course to enable a large, complex subject to be covered in a two-day period. The Workbook affords two keys essential to success of the short course. One is the Lecture Outlines in Part Two which assist the participant in following the structure of the lectures and provide the page references to the manual and Supplement, to which he can turn for clarification and detail and subsequent reference use. The concept of the module and the course revolves around the Workbook and it would probably be difficult to mount the short course effectively without it.

4. This Instructor's Manual, which provides him with some of the mechanics for mounting a successful course.

ADVANCE ANNOUNCEMENT AND MAILINGS

A sample brochure for the two-day short course is contained in Appendix A. This sample was used for the pretest of this module and can be adapted to other times, places and circumstances.

Those participants registering in advance should be sent some advance reading. This need was emphasized by participants in the Pretest, and can best be met by mailing the manual with a cover letter requesting that Chapters 1 and 3 be read before the course.

The instructor may want to enclose in the advance mailing a form to obtain information about the participants, their current work and, especially, their expectations for the course.

PREPARATION FOR EQUIPMENT AND SUPPLIES

Newsprint pads, 1 for each 4 participants, plus one for the Instructor,
Magic Markers,
Opake projector, for displaying products of the scenario sequences.
Viewgraph overhead projector, optional, for the instructors lecture illustrations. Office reproduction machine.

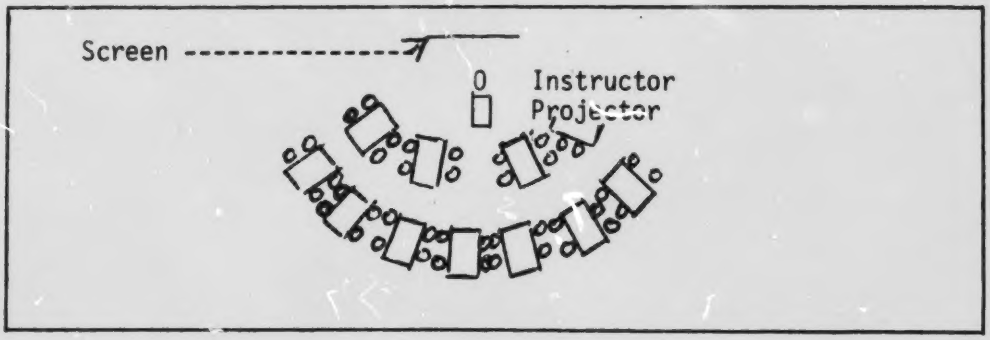
Supplies will also be needed as follows:

- Registration forms
- Note pads
- Ball-point pens
- Evaluation forms
- Drinking water
- Name tags
- Masking tape
- Worksheets for scenario exercises

Coffee breaks will also require advance arrangements.

ROOM ARRANGEMENT

A room arrangement is needed that will enable class to shift quickly and easily between a lecture mode and a small group workshop mode. All participants must also be able to see the projection screen. The following arrangement is recommended.



In some rooms, such as those square in shape, it may be best for the instructor to be in a cornor.

LECTURE OUTLINES

It is strongly urged that in his preparation of his lectures, the instructor develop a written outline for each lecture for the participants' use. The outline form Part Two of the Workbook.

Each outline should have the same title as the unit in the Course Schedule. Each part of the outline, especially those dealing with terms and concepts, should have in parenthesis the page numbers in the Manual and Technical Supplement to which the participant can turn for clarification or more detail.

The importance of the Lecture Outlines can hardly be overstressed. Participants cannot be counted on to have read the Manual prior to the course, nor will there be time for reading (other than quick reference) during the course. Consequently, the two-day course must be considered as only an introduction to the subject. The participant can be expected to become familiar with the outlines and the scenario concepts and procedures during the short course. Page references in the Lecture Notes can then enable him to go subsequently from this familiar ground to the precise places in the Manual and Supplement that he wants.

SCENARIO STRUCTURE

The Scenario exercises in Part Three of the Workbook are intended to constitute about two-thirds of the short course. Their purpose is two-fold: (1) provide "learning-by-doing" and (2) afford prompt feedback to participants on their mastery of the concepts and techniques. This is accomplished by a three-step cycle for each scenario sequence (SS), as follows:

(1) Lecture. This should explain and illustrate the concepts and techniques needed for the scenario. To aid the instructor in doing this, the page references to the appropriate sections of the Manual and Supplement that he will need to prepare his lectures and lecture outlines, are given in the following section. The instructor will also be aided in his lecture preparation if he will do the exercises himself. This will help him tailor his lectures to their application in the exercises. As noted above an important instructional device in the course is the lecture outlines in Part Two of the Workbook, which will enable the participant to follow the lectures more closely and facilitate his subsequent use of the Manual and Supplement.

(2) Exercise. Ten exercises, carrying the participants through strategic planning concepts and techniques, are contained in the Workbook, Part Three. These are to be done in groups of approximately four (4) participants each (See Room Arrangement above). The instructor (and assistant, if available) should move from table to table during the exercise noting both problems and good products which can be used doing the discussion.

(3) Discussion. After each exercise there should be a brief discussion to (1) answer any questions (2) provide feedback on the participants' performance. This can be done tactfully by (1) correcting any problems noted during the exercise (the perpetrator remaining anonymous) and (2) putting a good product on the opake projector. This illustration will permit self-evaluation by all participants, will prime discussion and afford a sense of closure on the exercise.

CONDUCT OF COURSE SEGMENTS

Course Segments

In order to tie the suggestions in this section to particular portions of the course, course segment numbers have been assigned as follows:

First Day		Segment Number	Minutes
8:30 - 9:00	Registration	1	30
9:00 - 10:00	Session Objective and Approach	2a	60
	Introductions	b	
	Strategic Situation Local Government	c	
10:00 - 10:15	Break		
10:15 - 11:00	Group Workshops: Participants' Objectives	3	45
11:00 - 12:00	Strategic Planning Elements and Process I	4	90
12:00 - 1:00	Lunch		
1:00 - 1:30	Strategic Planning Elements and Process II	5	--
1:30 - 3:00	SS 1, Monitoring and Problem Identification	6	90
3:00 - 3:15	Break		
3:15 - 4:15	SS 2, Problem Identification Workshop	7	30
4:15 - 4:30	SS 3, Problem Modeling Workshop I	8	115
4:45 - 5:45	Social Hour		

Second Day

8:30 - 9:30	SS 3 Problem Modeling Workshop II	8 con't.	--
9:30 - 10:00	SS 4 Delphi Forecast I	9	60
10:00 - 10:15	Break		
10:15 - 10:45	SS 4 Delphi Forecast II	10	--
10:45 - 11:15	SS 5 Delphi, Round II	11	30
11:15 - 12:00	SS 6 Initial Definition of the Desired State I	12	75
12:00 - 1:00	Lunch		
1:00 - 1:30	SS 6 Initial Definition of the Desired State II	12 con't.	--
1:30 - 2:45	SS 7 Policy Testing with Delphi	13	75
2:45 - 3:00	Break		
3:00 - 4:00	SS 8 Evaluation Task Force	14	60
4:00 - 4:30	Workshop Evaluation	15	30
4:30	Adjourn		

Page reference to the Manual and Supplement to aid in preparation of lectures and lecture outlines are provided below, along with other suggestions for conduct of the scenario exercises. The section numbers correspond to the course segment numbers in the schedule above.

1. Registration

Hopefully, most participants will be preregistered and name tags will be waiting for them at the desk. Location of the registration desk and classroom should be clearly signed.

2a. Session Objectives and Approach

References
Objectives (Workbook, Part One)
Approach (Instructor's Manual, Part One)

The purpose of this segment is to make participants feel welcome and relaxed, and to orient them to the structure and resources of the course.

2b. Introductions

Of the several ways to do this, the most common, and probably the best, is to have participants introduce themselves with a word about their agency or job. It is often helpful to other participants for the instructor to repeat the name as the participant sits down.

2c. Strategic Situations in Local Government

The foci here should be on (1) definition and function of strategic planning and (2) the local government situations that require it. Illustrations will be very helpful.

References
Manual, Chapters 1, 2 and pages 13-14 of Chapter 3.

3. Group Workshops: Participants' Objectives

Optional--but usually proves worth the time. The principal purposes are to sharpen participants' learning objectives for the course, and to alert the instructor as to their expectations so that he can target the content accordingly. Secondary objectives include getting the participants better acquainted with each other (especially team-building at each table), and provided closure to the preceding lecture segment.

This segment uses the Workshop technique. For about 15 minutes the group at each table, after naming a Recorder, pools a listing of the "Objectives, problems and directions" they want addressed during the course. These are put on newsprint by the Recorder in letters large enough to be read across the room. When the listing is complete each group member places a tally (1) in front of the three most important objectives for him/her. As each group finishes, the newsprint is posted on the wall. Optionally, when the class reassembles, a member of each group reads and explains the objectives. However, some instructors feel that this latter step has marginal returns on the time spent.

A better technique is for the assistant to the instructor to tabulate the results on newsprint, showing the number of participants who expressed basically the same objective. When this is posted (probably after lunch), the instructor calls attention to it and notes when on the schedule the various objectives will be addressed.

If there are objectives that will not be met by the regular schedule, modifying the schedule to provide a special session, might be considered. If a participant's objective just can't be met, this should be acknowledged.

References
Workshops (70-73)

4, 5. Strategic Planning Elements and Process

Both graphic and verbal illustrations will be especially helpful in this lecture. It should provide the essential conceptual framework for the course, but its abstract and lengthly nature must be mitigated.

References
Concepts (13-20), especially (21-64)

6. SS 1, Monitoring and Problem Identification

References
Concepts and techniques (21-24, 68-74)
Information System (Workbook, Part Three Introduction
and Part Four Files 1 and 4)

These concepts are basic to ability to perform subsequent exercises.

Discussion. Examples of the exercise products should be projected (using the opake projector) from the Workbook, and commented or critiqued by the Instructor.

7. SS 2, Problem Identification Workshop

This sequence initiates the group process that continues throughout the remainder of the course. Like Segment 3, it uses the Workshop Technique.

References
Workshop Techniques (70-73)
Concepts (21-24, 68-70)
Workbook (9-11)

Objectives of this exercise are:

(1) Experience in problem identification using statistics/indicators.

(2) Familiarization with the neighborhood which is to be the theater for the remainder of the scenarios.

(3) Team-building of each table group of participants.

(4) Experience with the small group Workshop techniques.

(5) Input information for Problem Modeling.

Discussion. Projection of products should provide an opportunity to "make the neighborhood come alive." What kind of neighborhood is it? What does a neighborhood like this look like? Who lives there? Participants should be encouraged to think of areas of cities with which they are familiar and share their observations with the class.

8. SS 3, Problem Modeling Task Force

Objectives of the SS 3 are:

(1) Experience in working with basic problem analysis and indicator system concepts.

(2) Experience with the Task Force technique.

(3) Input information for forecasting neighborhood futures.

References
Concepts (21-28)
Techniques (75-78)
Workbook (11-14)

Discussion. An objective at this stage is to generate interest in, and knowledge about, the particular problem that a group selects while this knowledge is distinctly secondary to the scenario objectives, it can enhance the realistic context of the exercises and help sustain interest in the exercises.

9, 10. SS 4, Delphi Forecast I, II

Objectives are:

(1) Experience in forecasting techniques, especially the Scenario.

(2) Experience in Using Delphi.

References
Concepts (32-37)
Techniques (79-103)
Workbook (14-16)

Discussion. Again projection of products should prime discussion.

A vital administrative detail. Immediately after the discussion the worksheets must be collected and the information in Column 12 and Box 13 tabulated for entry in the Round I Tabulation column of the SS 5 Worksheet. This should be entered on a master copy of the SS 5 Worksheet before it is reproduced. This will afford Round II participants with the base data they will need.

At the same time as the tabulations are being made, samples of the better "Rationales" in Box 14 should be selected and taped together for projection at the start of Round II.

Note that a break has been scheduled after SS 4 to allow for the tabulation. If the break does not allow enough time for the tabulation, the Instructor can lecture while his assistant tabulates. Note that once the raw data has been taken from Column 12 and Box 13, that the sheets are available for taping and projection, while the calculations are made and entered, and the SS 5 Worksheets are reproduced.

11. SS 5 Delphi, Route II

The objectives are to enable the class to experience the results of interaction within a Delphi panel, and to prepare information inputs for goal and policy formulation.

Since the conceptual and technique background is the same as for Round I, no lecture may be necessary. However the instructor should put on a good show of the best Rationales from Round I, using the opake projector. Ideally a complete cross-section of rationales should be presented, if time permits.

References
Same as for Round I
Workbook (16-18)

Discussion. What kind of future will the neighborhood have, if there is no new public intervention and market forces continue to operate as at present? How substantial is agreement -- how sharp, disagreement -- within the Panel?

12. SS.6 Initial Definition of the Desired State

Objectives of SS 6 are:

(1) Experience with goal setting concepts and techniques.

(2) Further experience with the Task Force technique, operating on a different kind of assignment.

(3) Input information for policy testing and evaluation.

References
Concepts (38-43)
Techniques (126-130)

Discussion. This may be the most difficult task for many of the participants, since it is "so non-technical, non-professional", so "arbitrary and frivolous". Perhaps the best way to deal with this in the lectures and discussion is to point out that individuals and groups, including themselves, set goals and objectives daily, and these actions often are well-considered and researched. Also, remind them that this is the initial setting of goals and objectives in a process of successive approximations.

13. SS 7 Policy Testing, Delphi Round III

Objectives are:

(1) Application of basic testing concepts.

(2) Further experience with Delphi, but in a policy testing application.

(3) Input information for policy evaluation.

References
Concepts (44-48)
Techniques (134-148)
Workbook (21-23)

Discussion. This can address similar questions to those in earlier Delphi sequences.

14. SS 8, Evaluation

The objectives are:

(1) Familiarization with concepts of evaluation.

(2) Further experience with the Task Force technique in yet a different context.

(3) Evaluation of the process, itself.

(4) Input data for goal redefinition, if indicated.

References
Concepts (47-48 especially), 44-47
Techniques (151-162)
Workbook (23-26)

15. Workshop Evaluation

Standard forms are available for this purpose, and the author and NTDS are very eager to have the benefit of results. An oral evaluation is also often very valuable. There is a definite "goal conflict" between running late into the afternoon and having a good evaluation.

Optional Scenario

A draft of a scenario setting for "Jefferson City, Texahoma" has been developed using the Information System in Workbook Part Four. This is available from the author.

R. L. Polk and Co.

Instructors (and others) who want more information on the Information System used in the scenarios can request User's Guide to the Profile of Change Urban Information Package, and copies of Update newsletter, from:

R. L. Polk and Company
Urban Statistical Division
431 Howard Street
Detroit, Michigan 48231

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APPENDIX A

STRATEGIC PLANNING WORKSHOP

VPI - Dulles, June 14-15, 1977

Strategic Planning is the setting of broad goal-and-policy directions for the community and organization, as contrasted with the more specific, performance oriented objectives and policies of programming and budgeting. It employes methods for determining and attaining the "desirable future," rather than only reacting to current crises. Strategic planning is concerned with how present decisions will affect the future and how total resources can best be mobilized for synergistic action.

CONTENT: This workshop will examine the basic research and analysis, data collection, and inventory studies necessary to develop a strategic planning process; techniques for the diagnosis of trends; the formulation of effectiveness measures; goal formulation procedures, including the role of public awareness/involvement programs; methods for the formulation, analysis, and evaluation of alternative courses of action; and the determination of policies to govern the acquisition, use, and disposition of public resources. Case studies and problem scenarios will focus on practical application of strategic planning techniques in local government.

ELIGIBILITY: Attendance is open to all public employees who are involved in the urban planning/management/budgeting process. Those who have or will have specific responsibilities in that process will find the workshops most appropriate to their needs. In general, the content of the workshops is directed toward chief administrative officers, budget officers and finance directors, budget analysts, planners, performance auditors, and program evaluators, and others with similar duties.

REGISTRATION: Registration in advance is necessary since class size will be limited to 15 persons. The fee is $10 per participant, which should be enclosed with the attached form. The fee includes a draft copy of the Strategic Planning Manual. Registrations will be confirmed. Accommodations may be found at the Dulles Marriott (across the road from VPI-Dulles or at the Dulles Holiday Inn (one mile away).

FACULTY: Robert C. Stuart, VPI & SU; Douglas C. Smith, VPI & SU; and Morton Meyer, Consultant to R. L. Polk, Co.

SPONSORSHIP: This workshop is one of a series of 10 on "Techniques for Improved Policy/Program Analysis Budgeting and Evaluation. The primary sponsor is the Center for Urban and Regional Studies at VPI and SU. The majority of funds for support and development and offering of the workshops is provided through the Urban Management Curriculum Development Project, a joint effort of the National Training and Development Service (NTDS) and the Department of Housing and Urban Development. Additional Assistance has been provided through the Intergovernmental Personnel Act and the Local Government Programs Section of the Commonwealth's Management Development and Training Service (MDTS). For further information concerning workshop content or faculty, please call Alan W. Steiss, project director, (703) 951-5960.

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Center for Urban and Regional Planning
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

REGISTRATION FORM

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Please register me for the Strategic Planning Workshop, June 14-15, 1977 at the VPI Dulles Facility. I enclose

☐ I enclose $10 registration

☐ I will pay June 14, 1977

Name ______________________ Title ______________________
Organization ______________________
Address ______________________
Phone ______________________

STRATEGIC PLANNING

Participant/Student Manual

Prepared by Robert C. Stuart

Module Number One
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PREFACE ON MODULE ORGANIZATION

This Participant's Manual consists of two volumes. Volume I is tailored in scale for use in a two-day short course. Part One of it briefly highlights the need for, and origins of, public strategic planning. Part two deals with the components of the strategic planning process, and how to design and implement it. Throughout Part Two as the concepts of strategic planning are introduced, they will be defined in all capitals (e.g. GOAL), thus providing a glossary-in-context for terms. The index can be used to locate the term in the text.

Volume II, Technical Supplement, contains "how-to-do-it" information on strategic planning techniques, organized around the components of the process. The two volumes together serve as a convenient handbook for strategic planning and management.

The Module also includes two other volumes -- a Workbook and an Instructor's Manual. The Workbook contains exercises that carry the participant through the strategic planning process.

PART ONE: NEEDS AND ORIGINS

CHAPTER 1. THE NEED FOR PUBLIC STRATEGIC PLANNING

What Is Strategic Planning?

Strategic planning is the setting of realistic goals - the determination of the desired future position or state of being of the organization or community (local, national or world) - and relating the current decisions and actions. Strategic considerations are characteristically present in current local government decisions involving one or more of the following:

(1) a major and/or long term commitment of a scarce resource such as money, land, energy or organizational resources,

(2) a commitment to change dependent upon public opinion,

(3) a commitment dependent on future uncertainties, and/or

(4) a commitment involving significant, perhaps irreversible, trade-offs between conflicting goals.

Examples in local government are not hard to find (although we could wish there were many, many more - and better - examples):

- The formulation and adoption of a comprehensive land use or transportation plan (commitment of scarce resources of land and money, public opinion).
- A city decision to provide a new public service, e.g. drug abuse prevention and treatment (public opinion).
- The community's policy regarding maximum growth, no growth or controlled growth. (long-term commitment of resources; public opinion).
- A decision to build a city coliseum (long term allocation of money and land, uncertain future).
- Annexation, consolidation (long-term commitment of resources and trade-offs between goals; public opinion).

All of these examples of public decisions have long-range implications. If overlooked or inadequately assessed, these longer-range aspects may have serious repercussions. "Decisions of expediency frequently become institutionalized; emergency tax measures have a way of becoming permanent.

Traditions in government are easy to form and difficult to break."[1] The primary purpose of strategic planning is to broaden the base on which to make public decisions having long-range implications.

A strategic planning approach to current decision-making may be contrasted with the incremental, disjointed, and cumulative pattern of decisions characteristic of many governmental decisions. Actions tend to be reactions to problems and crises - "fire-fighting." Attempts to relate decisions to community goals are frustrated by lack of an appropriate frame of reference. The planning that is done is often limited to determining the most effecient, cost-effective way to achieve a single, politically-given tool.

In addition, different interest groups focus on successive decisions, further contributing to the disjointed pattern. The net effect is a cumulative process; in time the incongruent parts are added up to determine what the whole will look like. Like the proverbial camel, the community "looks like an animal put together by a committee."

A premise of strategic planning is that many of our major concerns - a smoothly functioning community, adequate resources of land, water, open space, money, energy, etc., a vibrant economy, and a more harmonious, humane social system - require a more farsighted approach than can be achieved by a process of cumulative, incremental actions.

The cumulative, incremental style in government can be contrasted with that in the military and business, where strategic planning is well-accepted and credited with many successess. The importance attached to strategic planning in the corporate and military sectors is attested to by a large and growing body of literature. In contrast, published information on public strategic planning is almost non-existent.

STRATEGIC PROBLEMS URBAN MANAGERS FACE

The term "strategic planning" is seldom heard in local government. Yet, many urban managers today are practicing aspects of strategic planning that qualify under the definition starting this chapter. But they carry out these activities without having the benefits of a well-developed body of practice that their private counterparts enjoy. The current training module is, in fact, a pioneering effort to translate corporate practice to the much different climate of public management. A first step is to recognize some of the activities of local government that usually require strategic planning. A rather rough classification of these activities is offered as follows:

(A) Activities Relating to Driving Forces in the Natural, Social-Economic-Political Environment of the Local Community. While these forces pose local problems and require local action, they are manifestations of larger regional, national and international dynamics. The driving forces may necessitate creation of new local goals and behavior patterns and modification of others. The actions to be taken are usually in the face of an uncertain or redefined future.

(1) Actions responding to economic and technological crisis -- depressions, inflation, unemployment, fuel shortages, oil spills, explosions, poisonous gas accidents, radioactivity, civil defense, accidents in the transportation of hazardous materials, recycling.

(2) Actions responding to persistent socio-economic problems -- poverty, welfare, crime, education, drug abuse, sexual mores, etc.

(3) Actions responding to major shifts in relationship with federal and state governments -- the requirements of Community Development Block Grants, for participation in Metropolitan Planning Organizations and Health Systems Organizations, etc.

(4) Provisions to deal with possible natural disasters -- floods, tornados, earthquakes, hurricanes and epidemics.

(B) Local Community Responses to the Environmental Forces. Many of the actions listed under (A) require structural change -- i.e., changes in basic behavior patterns -- as follows:

(5) New local government roles, policies and functions dependent upon public attitudinal or social change.

(6) Local governmental adaptations to the new demands, often changing the context for decision-making, and always requiring behavioral changes.

(a) Major organizational developments and behavioral changes. Changes -- external, like annexation and consolidation, and internal, like establishment of an Office of Management and Budgeting or a new department.

(b) Major changes in administrative procedures -- e.g. establishment of program budgeting, computer systems, etc.

(7) Local governmental actions requiring basic changes in citizen behavior.

(C) Local Governmental Actions Relating to the Allocation of Scarce Resources and/or Affecting Multiple, Conflicting Goals.

(8) Infrastructure improvements -- sewer and water facilities, transportation networks, etc. These capital-intensive physical improvements must be planned and operated as balanced systems, usually require decades to construct and amortize, and, when built, they set permanent patterns of community development and quality of life.

(9) Capital improvements for other public systems, including parks, fire protection, police protection, city administration, courts, and schools.

(10) Financing requirements and revenue sources -- debt management, assessment policies, tax rates, pension systems, and state and federal grant prerequisites.

(11) Urban development plans, often private, but requiring approvals and collaboration.

(12) Environmental Protection. Protection of natural ecologies requires commitments to long-term care. Urban development and environmental protection provide a classic example of goal conflict.

THE GROWING IMPORTANCE OF URBAN STRATEGIC PLANNING

The growing interest in strategic planning by local governments is fueled by their attempts to cope with the same factors influencing corporate planning (as we will note in the next chapter). Increasing size, complexity, interdependence, lead time, uncertainty, organizational diversity, internal resistences, need for control, and, above all, vulnerability to shifts in the natural-economic-social-political operative environment. Two additional forces not experienced in the business world are operative in the local public sector--the emerging local government role in the federal system and the "anchoring effect" of public opinion.

Emerging Local Government Role in the Federal System

In the conflicting and often confusing trends of the "new federalism", there is an emerging need for a greater strategic planning capability in urban government. A long list of events contribute to this need, including revenue sharing, the failure of centralized national planning for urban problems, and the series of federal acts and regulations designed to give local governments, often collectively through area-wide agencies, a greater role in shaping their destinies, vis-a-vis the state and federal levels. The federal government's share in all public expenditures is steadily declining. In the 1950s the federal share of public payrolls was over 60 percent of the total, while by 1985, as revenue sharing increases, the federal portion may well fall below 40 percent.[2] Clearly this enhanced local role will be accompanied by the need for improved performance, particularly in the area of planning.

The "Anchoring Effect" of Public Opinion

While business and industry are increasingly feeling the pressures of public attitudes, they are still far removed from the intense day-by-day public pressures experienced by local urban managers. Technical solutions to problems or courses of action readily taken by private managers are not available to public managers due to constraining public opinions. "The ship of state lies anchored when it should be underway." Strategic planning by local governments involving public information, debate and participation offers promise that needed public policy changes can be accelerated.

ENDNOTES

1. Alan Walter Steiss, *Public Budgeting and Management* (Lexington, Mass.: D. C. Heath and Company, 1972), p. 201.

2. Gary Gappert, "Post-Affluence: The Turbulent Transition to a Post-Industrial Society," *The Futurist*, October, 1974, p. 213.

CHAPTER 2. MILITARY AND CORPORATE ORIGINS

PLANNING -- THE HUMAN TRAIT

Almost from his first appearance, man was distinguished from his predecessors by his ability to think of the future. His concern about tomorrow, and even eternity, was manifested in his handcrafted tools, cave art, and burial arrangements. Primative homo sapiens took time out of his present to prepare physically, mentally and emotionally for the future. His ability to use past experience in the present to plan for the future gives man an advantage which in the struggle for survival against other species, has proven superior to his foe's greater strength, swiftness or ferocity.

Modern man's situation has not changed from that of his ancient forebearers. He has the possibility, however limited, to shape his future. The nature of his adversities and opportunities has changed, yet he can relate himself to both his past and his future, and thus can act in the present to seek a better future.

Modern organizations--military, corporate, and public--like human individuals, are inescapably related to changing environments that they, to an extent, can shape. As Ross Webber has written,

> These may be beautiful thoughts, but they are tough to act upon. All managers are faced with the nagging reality of their jobs--pressure to concentrate on the present, ignore the past, and let tomorrow take care of itself. Managers who are so taken in, however, are not exercising human leadership to its fullest potential. Behaviorally and psychologically, management should be oriented toward the future, carving time out of the present in the service of tomorrow--like those cave painters.[1]

Large organizations, including most local governments, as a result of their vulnerability to a greater range of circumstantial changes and their own internal resistances to adaptation, often find that planning is particularly essential to their purposes and survival. Planning can be defined in many ways: thinking about what is wanted and how to achieve it, determining in advance what is to be done, or preparing for the future by making decisions now. Planning is management's means of anticipating the future and guarding itself against the threats of time and change. Planning is visualizing "the future as history" by determining how we would want the future to actually be, if we could jump ahead in time and look backwards.[2] In this turbulant world a manager might say, "The purpose of planning is not to precisely predict the future, but to uncover the things we must do today in order to have a future."

STRATEGIC PLANNING

All of these definitions have a special meaning for strategic planning. For local governments, strategic planning is the process of determining the policies required to resolve basic problems and achieve a desired set of goals of the community. It is concerned with the effects of current governmental actions on the problems and goals.

Strategic planning looks beyond the optimality (or suboptimality) of current decisions to create favorable positions and/or conditions to enable the organization to meet future demands and crises, and persistent problems. The twin ideal goals of public strategic planning are the desired state of the community and the capability of the governmental organization to achieve and maintain the desired state.

The strategic planner is also concerned with the realism of the goals. This concern requires attention to the potential future conditions that will govern effectiveness of organizational actions to reach the community goals. Military and corporate strategists have always been concerned with alternative futures. In the military, this takes the form of anticipating the enemy's possible strategies and being prepared to achieve one's own goals despite them. The corporate strategist seeks to predict and counter his competitor's stratagems.

The public official does not need "enemies" and "competitors"; fate is fickle enough. Even the short term holds many uncertainties for local government: natural disasters, utility or transportation failures, sudden expansions or contractions in economic base, water or energy shortages, human misjudgements, court suits, inflationary crunches, revenue shifts, actions of other governments--to mention but a few of the more obvious and probable "alternative futures" for which local government needs to be prepared.

In this chapter the meaning of strategic planning will first be examined from its military and corporate origins. The kinds of local government concerns that call for strategic planning will then be identified. This discussion is followed by a brief look at some of the changes in American society that are making strategic planning by local government increasingly necessary.

MILITARY ORIGINS

The origins of strategic planning lie in military history. Its roots go back hundreds, probably thousands of years. The word "strategy" is from the ancient Greek and mean "generalship." The current dictionary[3] definitions of "strategy" and "strategic" are strongly flavored with these military origins:

> Strategy 1a. (1): The science and art of employing the political, economic, psychological and military forces of a nation or group of nations to afford the maximum support to adopted policies in peace or war. (2): The science and art of military command exercised to meet the enemy in combat under advantageous conditions - compare TACTICS ... 2a. A careful plan or method: A clever stratagem. b. the art of devising or employing plans or stratagems toward a goal.

> Strategic 1: Of, related to, or marked by strategy, i.e., strategic value of the position, a strategic retreat. 2a. Necessary to or important in the initiation, conduct, or completion of a strategic plan. b: Required for the conduct of war, i.e., strategic materials. c: Of great importance within an integrated whole or to a planned effect, i.e., emphasized strategic points. 3: Designed or trained to strike an enemy at the sources of his military, economic or political power, i.e., strategic bombs.

The distinction between "strategic" and "tactical" is vital. The definition of the latter word is helpful in understanding the military etymology of the former.

> Tactical 1: Of, or relating to combact tactics: as a: Involving actions or means of less magnitude or at a shorter distance from the base of operations than those of strategy. b: Of an air force: of, relating to, or designed for air attack in close support of friendly ground forces. 2a: Of or relating to tactics as (1) Of or relating to small scale actions serving a larger purpose, (2) Made or carried out with only a limited or immediate end in view.[4]

These definitions have a military twang, but their essences hold for public and corporate management. Strategic planning is concerned with anticipating future conditions, and gaining and/or maintaining favorable positions for future operations under these contingencies. These desired positions constitute goals and objectives, the achievement of which requires the devising of appropriate strategies and the securing of need resources. All of this requires a wealth of information - a comprehensive, "holistic" perspective.

In contrast, tactical planning operates from positions that may have been achieved by previous strategies to implementing currently selected strategies and tactics. It is concerned with the effectiveness of present operations (programs and projects).

Within the past 50 years strategic military art and science has been advanced by military gaming and the development of a theory of games.

Military games embrace a number of types including (1) projection of a number of possible enemy strategic positions or actions predicated on a forecast or favorable conditions, (2) development of strategic responses to influence the future conditions, and/or counter the perspective enemy action, and (3) testing of the strategies through simulated tactical operations ("war games").

CORPORATE DEVELOPMENTS

Game theory also facilitated the development of corporate strategic planning. In the corporate context "enemies" are "competitors". The corporation's "strategic position" vis-a-vis its competitors may be improved by product research and development, greater market penetration, better organization or personnel, more efficient production, and similar strategies. The concepts and techniques of corporate strategic planning have received wide attention in business publications[5] and books.[6]

American businesses do more planning than anyone else in the world.[7] There are several reasons why corporate planning is essential in our vast and complex, interdependent national and world economic system.

One reason strategic planning is vital to the modern corporation is the lead time required for product development and organizational building. Advances in modern technology are possible through narrowing specialization of increasingly complex tasks. Hence lead times have grown enormously. The Spanish Armada which threatened England in 1588 consisted of 120 ships, all built in one year. A comparative fleet today would require over 20 years to plan, design and construct.

A second and related reason for the great rise in corporate planning since World War II is the increasing rapidity and uncertainty of world change. The ill-fated Edsel automobile provides a case in point. When the first plans for the Edsel were formulated in the early 1950's, the automobile industry was moving ingo an era of longer, heavier and fancier models, and Ford wanted to fill a gap in the middle of its product line. Three years of lead time was required from commitment to the design in 1954 to marketing in 1957.

The Edsel seemed to do well initially. Then in October, 1957, the Soviet Union orbited its sputnik, which shocked the United States and for a period the public turned toward more austere and conservative cars. This trend was reinforced by the economic recession of 1958 which was a boom for compact cars and American Motors. The Edsel died after a brief, two-year life.

The full Edsel story offers many lessons for strategic planning. Suffice it here to point up the essential role of managers in anticipating as best they can the possible twists of the future and to develop contingency responses to sustain the organization's mission. Theirs' is the central task of minimizing uncertainty and its consequences.

A third reason for strategic planning is the increasing complexity of corporate organization. The interdependence of the many specialized units means that decisions cannot be made disjointedly. High-level planning must view the organization as a total system to ensure that the objectives in the various units are coordinated, and are compatible with the longer range strategy of the company.

Finally, corporate strategic planning is a natural concomitant to the growth of enormous organization during the last three decades. Larger organizations, by virture of their size are more likely to be simultaneously exposed to a broader range of possible changes in their external operating environment, and internally more likely to be resistant to change. Centralized strategic planning is one tool with which top-level executives can gain greater control over their sprawling enterprises.

As Webber points out, unless a company regularly and effectively reexamines its objectives in relation to its resources and operating environment, its strategy will become obsolete. The changes from year to year in Fortune magazine's annual list of the 500 largest corporations provide dramatic evidence of this.[8]

TIME SPAN

The time span of corporate strategic planning appears generally applicable to the public sector as well. Probably the best classification is one based on the lead time required to make certain impacts on the business, or to modify those impacts. In corporate planning this often leads to a three-level approach to planning, as follows:

Time Span For Planning and Action	To Determine
1. Long-Range	Mission, Strategy and Organization
2. Intermediate Range	Quantity and Quality of Inputs and Outputs
3. Short Range	Schedule of Activities

Thus, through long-range strategic planning, management can set goals, mission, strategy and organizational structure. In other words, long-range plans may involve a fundamental redirection of the corporation's activities. In intermediate-range planning, managers must accept the general structure, mission and strategy of the organization, but can manipulate the quantity and quality of inputs, outputs, people, material, and capital. In short range planning, all these factors are fixed, but managers can schedule specific activities that may vary the application of resources and technology. The actual time spans for each level of planning can vary widely, as suggested by the following table.[9]

	Industry	
Planning Time Span	Automobile	Garment
Long-Range, Strategic	Over 10 years	6 to 12 months
Intermediate-Range	1 to 2 years	2 to 3 months
Short-Range	2 to 4 weeks	daily

As will be seen in Chapters 3 and 17,* local government management also usually consists of three levels of planning, which closely approximate those in corporate practice.

CHARACTERISTICS OF THE PUBLIC SECTOR

Just as business and industry have borrowed from military experience, this training module draws heavily on corporate practices. There are some questions that may be raised at this point. Since the contexts of private and public management have important differences, is corporate strategic planning really transferrable to government? Two contextual differences immediately come to mind:

1. Business is more concerned with competition; government, with public service.

2. Business serves a more narrow range of goals. The primary one is profit, on which there is general concensus among stockholders, managers, and directors. Government, however, must meet the multi-goal expectations of its constituents.

Certainly one feature that must be modified in translating military and corporate strategic planning for public practice is the concept of "the enemy" and "our competition." True, officials often find themselves in situations where "the Feds", the "suburbs", or "the machine" is on "the other side". However, while such aspects of conflict between political factions, local governments and levels of government do affect public policy determination, their role is characteristically much different than the over-riding "win or die" psychology of military and coporate strategic planning.

There is a close analogy, however. While their opponents may not always be so personified, public managers often have the same sense of a "good fight." As a local manager put it, "Public management is like a chess game. You are on one side of the board, making the best moves you can. On the other side, although you can't see him, is the 'Great Unknown' throwing everything he's got against you. It's your wits against his." Time moves quickly on; urban governments inevitably face new threats to be overcome and new opportunities to be seized. Strategic planning is the manager's best tool for this "good fight."

The second difference above must also be taken into account. Far more than his private counterpart, the public manager experiences constant, and other conflicting, demands from "the public." He is expected to respond to these demands equitably, efficiently and effectively. Important to strategic planning--and his survival--he must reconcile, or at least minimize, the conflicts. In recent years many public managers have given greater attention to provisions for public information and participation so that the essential climate of governmental credibility, and community understanding and support, will be maintained. This manual has attempted to recognize the significant role that interagency and public participation must play in governmental strategic planning. This has been done by providing for participation in the strategic planning process (Part II) and by describing appropriate techniques (Part III).*

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*Chapter 17 can be found in the Volume II, Technical Supplement

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*Part III can be found in Volume II, Technical Supplement

ENDNOTES

1. Ross A. Webber, Management: Basic Elements of Managing Organizations (Homewood, Ill.: Richard D. Irwin, Inc. 1975), p. 267. Many of the ideas in this chapter are traceable to Dr. Webber and the debt is gratefully acknowledged.

2. See Robert Heilbroner, The Future as History, (New York: Harper and Row, 1960)

3. Webster's Seventh New Collegiate Dictionary, Springfield, Mass., Mass., 1970, p. 867.

4. Ibid., p. 897.

5. See Bibliography.

6. For example, Ross A. Webber, Management: Basic Elements of Managing Organizations (Homewood, Ill., Richard D. Irwin, Inc., 1975), Chapter 12. A comprehensive treatment of planning is G. A. Steiner, Top Management Planning (New York: Macmillan Co., 1969), Other books that can be recommended include two good smaller books are E. K. Warren, Long-Range Planning: The Executive Viewpoint (Englewood Cliffs, N.J.: Prentice-Hall, 1966) and R. L. Ackoff, A Concept of Corporate Planning (New York: Wiley-Interscience, 1970). A survey of books on planning is contained in R. J. Mockler, "Theory and Practice of Planning," Harvard Business Review, (March-April, 1970), p. 148 ff.

7. Webber, op. cit., p. 268.

8. Ibid., p. 278.

9. Ibid., p. 270.

PART TWO: A PUBLIC STRATEGIC PLANNING PROCESS

CHAPTER 3. OVERVIEW

TENETS OF STRATEGIC PLANNING

In Chapters 1 and 2, as the need for public strategic planning and its origins in military and corporate worlds were examined, several concepts emerged as reoccurring themes. These concepts serve as a good starting point for development of a process for strategic planning in this Chapter. They can be summarized as follows:

Concept	Tenet
GOAL/POSITION/DESIRED STATE OF THE SYSTEM	What strategic planning is all about: Where the organization/community wants to be.
ALTERNATIVE FUTURE	While many possible developments can be predicted with certainty. Hencey, one prepares by examining the possible contingencies.
STRATEGY	Broad policy: How to achieve the goal/position/desired state by influencing the future through current actions.
FATE	There are many factors influencing the future influencing the future in addition to the organization's strategies.
MONITOR	To determine which future is actually being realized; keep on top of developments.
INDICATORS	Goal-oriented data which helps to reveal current trends and identify problems.
PROBLEM ANALYSIS	Research which identifies and measures the factors that influence problems and their amelioration; devises indicators to measure the influences; and sets the stage for forecasting.
CURRENT ACTIONS	The day-by-day decisions in the here-and-now of governmental policy makers. It is these actions which determine whether or not strategic goals will be attained.
COMMUNITY	The total physical-social-economic-political complex served (in this Manual the local community, unless otherwise defined). Also, all of the people in the community who are

	benefitted or are hurt by local government policies or actions - in short, just about everybody.
COMMUNITY INVOLVEMENT	Open, credible, two-way communications between the community and officials responsible for strategies and actions - an essential ingredient in public strategic planning.

THE BASIC LOGIC

There is a basic logic -- a strategy, if you will -- for strategic planning that incorporates the tenets just summarized.[1] It is this logic, this mode of thinking and acting, that characterized effective public strategic policy-makers and managers. This logic, shown in Figure 3-1, is followed throughout this training module. The heart of the logic is five stages, represented in the boxes.

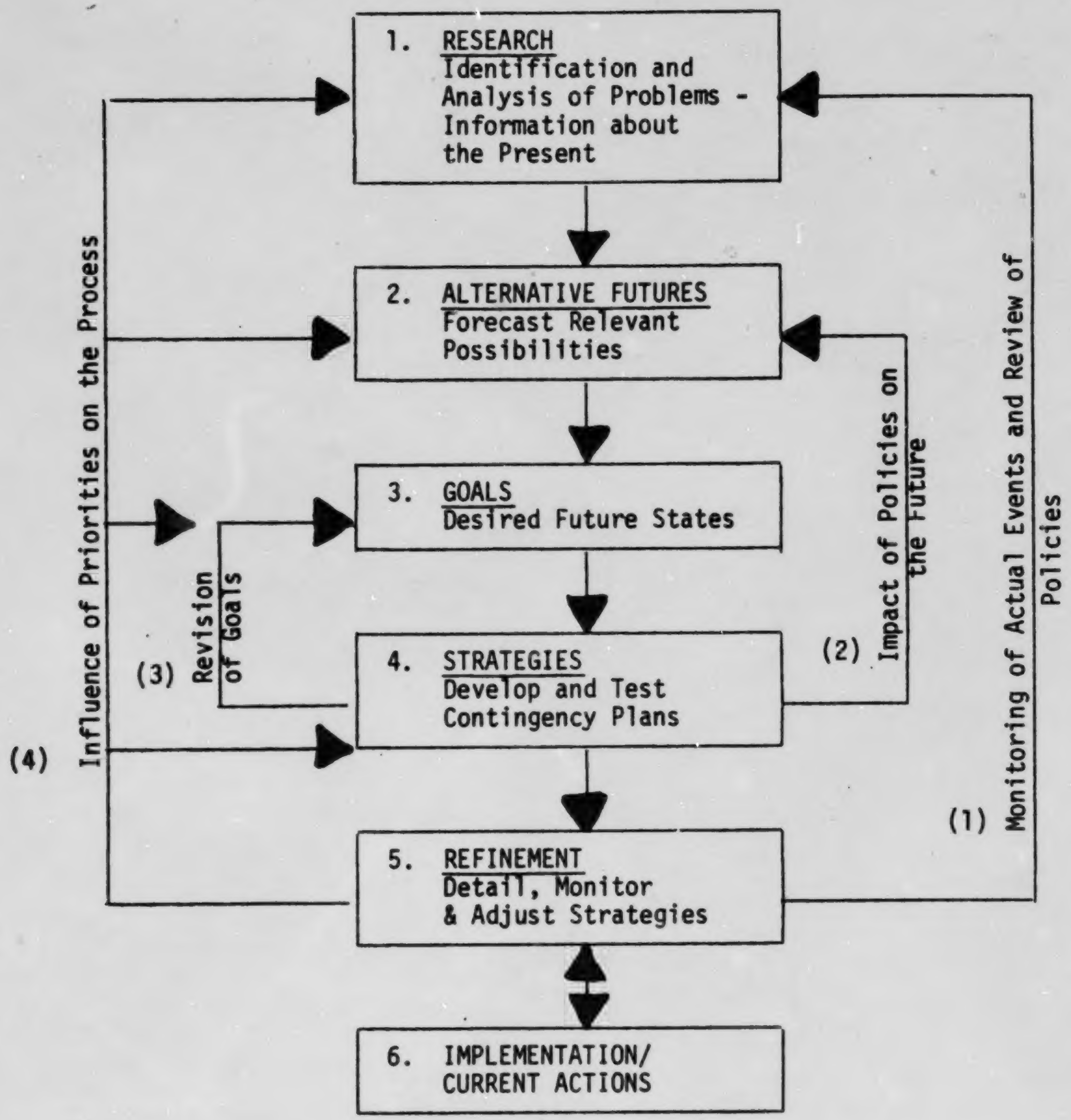
Stage 1. Research, starts typically with some problem being brought to officials' attention. The problem is then analyzed for its causes, for its interrelationships with other problems, for its goal-orientation and for measures of goal-achievement. This is an empirical, data-based step. To illustrate with a hypothetical example: a County Manager and Council, in a growing urban area, are confronted with the problem of a rapid increase in the cost of transporting clients of various human services. Replacement of separate agency van and auto systems with a central public dial-a-ride system is proposed. Analysis of the problem shows that the major factors influencing the sharp cost rise are increases in (1) the number of vehicle trips, due, in turn, to county growth and expansion of social services, and (2) driver's salaries, the biggest single cost component.

Stage 2. Alternative Futures, builds on the problem analyses to forecast the future conditions and possibilities. In the above example, the forecasts might show that costs would continue to rise sharply for the separate agency transportation systems as well as for the dial-a-ride alternative, since both are labor intensive.

Stage 3. Goals, the desired state, is defined in terms of measurable objectives. Initially, these targets may be set in the absence of a viable course of action. In our hypothetical example, the Manager's objective is to cut the cost per trip in half. He creates a staff task force to find a way to do this.

Stage 4. Strategies, are devised for achieving the desired state and for coping with the contingent alternative futures. The strategies are tested for their effectiveness in achieving the goal(s). In the example, the task force finds that a "transportation stamp" alternative appears most affective in achieving the objective. The stamps could be applied toward ownership of a car in the client's household, rental of a neighborh's car with or without a driver, or use of a taxi. After testing the policy, the objective is reset at the more realistic level of a one-third reduction in the cost per trip.

FIGURE 3-1: The Logic of Strategic Planning


1. RESEARCH
Identification and Analysis of Problems - Information about the Present
2. ALTERNATIVE FUTURES
Forecast Relevant Possibilities
3. GOALS
Desired Future States
4. STRATEGIES
Develop and Test Contingency Plans
5. REFINEMENT
Detail, Monitor & Adjust Strategies
6. IMPLEMENTATION/ CURRENT ACTIONS
(1) Monitoring of Actual Events and Review of Policies
(2) Impact of Policies on the Future
(3) Revision of Goals
(4) Influence of Priorities on the Process

Stage 5. Policy Refinement, When necessary the selected strategy is detailed, pilot studies made, and indicator systems improved. Monitoring of the implemented policy indicates the level of actual performance and when further policy modifications may be needed. In the example, it is found that poor taxi service in one subarea is actually handicapping clients in receiving essential services. A contingency plan is instituted to provide an interagency, transportation-stamp supported van service.

The feedback loops diagrammed in Figure 3-1 are essential; strategic planning works best when it is iterative and new insights are fed back into a continuous, cumulative process. Four of the most important interations are shown: (1) the monitoring of actual events updates the data base for the review of alternative futures and strategies, (2) alternative strategies (policies) are tested for their impact on the future, (3) goals which prove infeasible are modified, and (4) the priorities developed by the process serve to guide strategic planning decisions.

A PUBLIC STRATEGIC PLANNING PROCESS

The logic of strategic planning, just described, can be readily translated into managerial activities. Figure 3-2 starts this translation by showing the five steps - research, futures, goals, policies, refinement -- in more detail. The steps are also related to other governmental processes -- development planning, program planning, financial planning, management and organizational improvement, and actual operations. In addition, the principal points at which research of a more scientific nature may be valuable are indicated.

The Strategic Planning process represented by Figure 3-2 provides a framework for the remainder of the Manual. The rest of Part Two (Chapters 4-9) describes managerial activities and thought process characteristic of strategic planning. In Part Three (Chapters 10-16)* techniques available for some of these activities are discussed in more detail. Finally, Part Four returns to point out opportunities for beneficially integrating strategic planning activities with other local governmental processes.

The interactions between strategic planning and other organizational processes provide the basic structure to Figure 3-2. This structure is echoed in the more detailed figures for the five stages in the following chapters. The purpose of the format is to show more clearly the interdependences between the strategic planning process and other processes of local government. It is noteworthy that a very large part of the informational needs of strategic planning can be met by by-products of other organizational activities. In turn, strategic planning performs its mission of providing these activities, especially development planning and program planning, with a comprehensive and future-oriented perspective. To facilitate cross referencing discussion of these interactions in Chapters 4-9 and again in Chapter 17,* the letters and numbers, e.g. D3,which appear in Figure 3-2 refer to cyclical stages of the governmental processes depicted in Figure 17-2, as follows:

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*These Chapters can be found in Volume II, Technical Supplement.

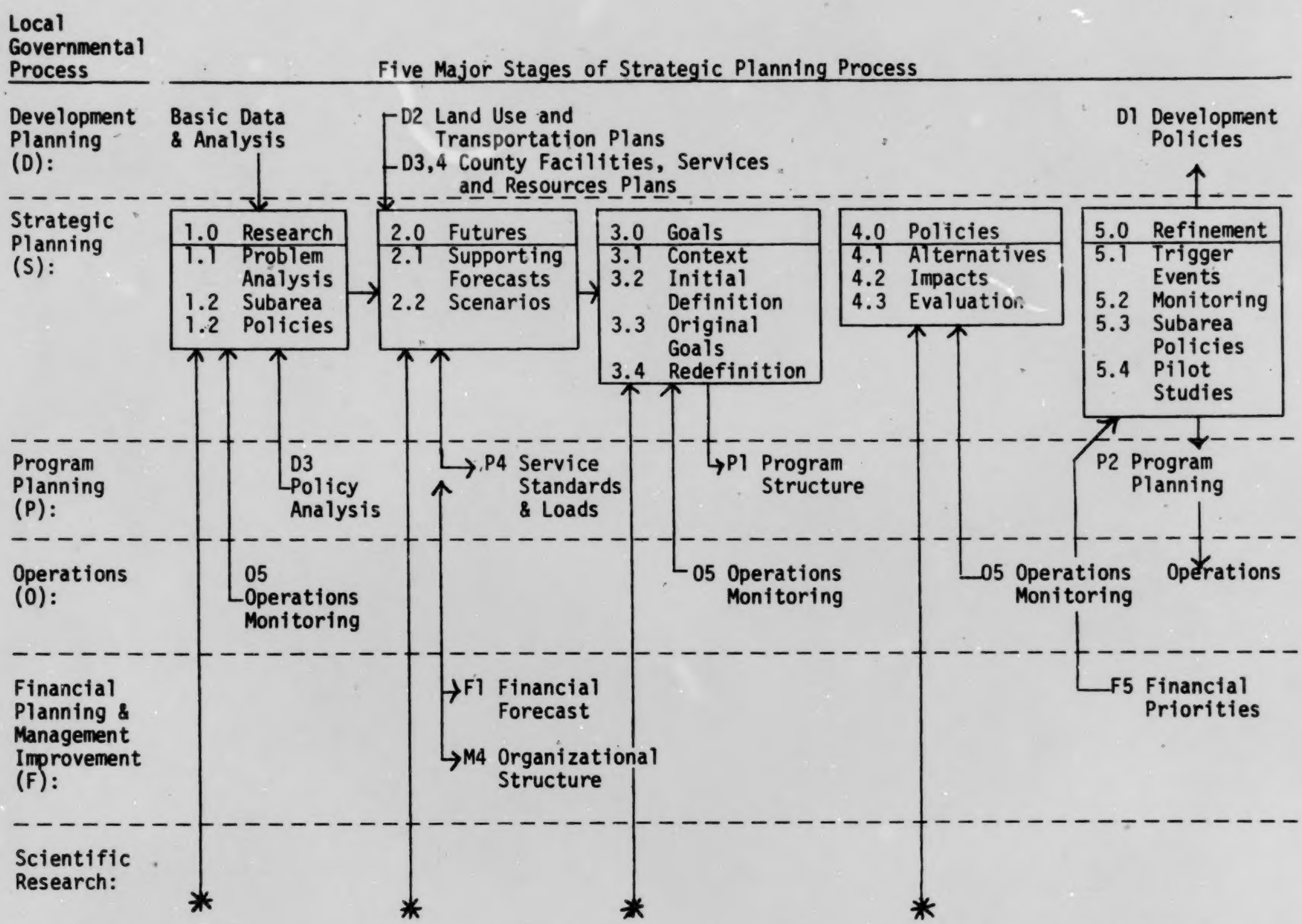
Local Governmental Process
Five Major Stages of Strategic Planning Process
Development Planning (D):
Basic Data & Analysis
D2 Land Use and Transportation Plans
D3,4 County Facilities, Services and Resources Plans
D1 Development Policies
Strategic Planning (S):
1.0 Research
1.1 Problem Analysis
1.2 Subarea
1.2 Policies
2.0 Futures
2.1 Supporting Forecasts
2.2 Scenarios
3.0 Goals
3.1 Context
3.2 Initial Definition
3.3 Original Goals
3.4 Redefinition
4.0 Policies
4.1 Alternatives
4.2 Impacts
4.3 Evaluation
5.0 Refinement
5.1 Trigger Events
5.2 Monitoring
5.3 Subarea Policies
5.4 Pilot Studies
Program Planning (P):
D3 Policy Analysis
P4 Service Standards & Loads
P1 Program Structure
P2 Program Planning
Operations (O):
O5 Operations Monitoring
O5 Operations Monitoring
O5 Operations Monitoring
Operations
Financial Planning & Management Improvement (F):
F1 Financial Forecast
M4 Organizational Structure
F5 Financial Priorities
Scientific Research:
*
*
*
*

FIGURE 3-2: Strategic Planning Process Interactions With Other Local Governmental Processes and Scientific Research.

Letter	Local Governmental Process
D	Development Planning (Physical)
F	Financial Planning and Capital Improvement Programming
M	Management Improvement and Organizational Development
O	Operations
P	Program Planning
S	Strategic Planning

One source of information suggested in Figure 5.1, but not touched on in Chapter 3 is the potential contribution of the scientific community, particularly the social scientist. The work of scientists has so often had limitations for practical use that many public officials are reluctant to seek aid and information from this direction. However, a strong countertrend should be recognized. Through such research organizations as the Urban Institute, the National Science Foundation, the Transportation Research Board and university research centers, with the incentive of federal and state funding, policy-oriented research is proving increasingly relevant and usable.

Some Caveats

There are a number of caveats required to put this chapter in context. First, the process diagrammed and described in the chapter is not an endorsement of an elaborate technical process that necessarily requires additional staff. A second major danger is presenting a block diagram of strategic planning is that it may be read as one that must be followed rigidly in all details. An even greater hazard, since "it is all laid out," would be to conclude that it can be totally delegated. None of these conclusions is valid.

What the process is about, most of all, is a style of policy-making and management. Better data and techniques are needed -- yes! But what is needed most is managers who think strategically. What is the style of strategic management? For one thing, it is the persistent asking of, and seeking satisfactory answers to, certain questions: about possible contingencies, about desired outcomes, about appropriate actions. Underlying the questions and answers are a perspective and set of values: that the future beyond the next election is important; that the future can be probed, if not predicted; and that a desired future condition for the community and the organization can be defined and is worth seeking. Finally, ideally, the strategic management style is reciprocated by all officials concerned with policy-department heads as well as elected individuals. Some concommitant points are:

1. A strategic planning process, similar to the one diagrammed in this chapter, should become part of the regular management system of the upper level management team of every local government.

2. The elements depicted compose a framework within which the process for a particular application can be readily selected.

3. While some of the data collection, analysis and forecasting, and community involvement activities can be delegated, the core of strategic planning must have the personal attention of the top managers.

4. While a growing science, strategic planning is also much of an art -- and will remain so -- requiring imagination, judgement and confidence.

The Process Outlined

Figure 3-2 represents a "strategy of strategic planning" for local government managers in five stages -- Research, Futures, Goals, Strategies, and Refinement. The five following chapters each enlarge on one of the five stages of the process according to the following outline:

- S0.0 Strategic Planning System Design
- S1.0 Basic Research Stage
    - S1.11 Problem Definition
    - S1.12 Indicator System Design
        - S1.121 Organizational Performance
        - S1.122 System Performance
        - S1.123 Influencing Factors
    - S1.13 Indicator System Data (Calibration)
    - S1.14 Qualitative Factors
- S1.2 Subarea Data and Planning Horizon
- S1.3 Policy Inventory
    - S1.31 Inventory of Stated Goals and Policies of Community Groups
    - S1.32 Attitude Surveys
    - S1.33 Organizational Goals Structure
- S2.0 Alternative Futures Stage
    - S2.1 Supporting Forecasts: (a) External Factors:
        - S2.11 Regional and National Factors (PSEE) Forecast
        - S2.12 Community Development Forecast
        - Supporting Forecasts: (b) Organizational Factors:
        - S2.13 Community Needs Forecast
        - S2.14 Organizational Development Forecast
        - S2.15 Financial Forecast
    - S2.2 Scenarios
- S3.0 Goals and Objectives Stage
    - S3.1 Appraisal of Goals Context
    - S3.2 Initial Definition of the Desired State

- S3.3 Revised Organizational Goals Structure
- S3.4 Redefinition of the Desired State

S4.0 Alternative Policy Responses Stage

- S4.1 Alternative Policies
- S4.2 Policy Impact Assessment
- S4.3 Evaluation
    - S4.31 Community Involvement and Conflict Management
        - S4.311 Acceptance Forecasting
        - S4.312 Community Involvement Strategy Formulation
        - S4.313 Organization for Community Involvement
        - S4.314 Conduct of Community Involvement
    - S4.32 Policy Selection

S5.0 Policy Refinement Stage

- S5.1 Trigger Events, Action Sequencing and Priorities
- S5.2 Monitoring and Policy Adjustment
- S5.3 Subarea-Specific Policies
- S5.4 Pilot Studies

Strategic Planning System Design

The activity "S0.0 Strategic Planning Process Design" in Figure 3-2 is a reminder that a local government engaging in strategic planning will be guided by either deliberate overall design or incremental improvisation, or, more likely, a combination thereof. While it is shown in the Figure in its logical position as the initial activity in the process, as a practical matter it is more easily discussed after the process itself is better understood. It will be covered in Chapters 9 and 17.*

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* These chapters can be found in Volume II, Technical Supplement

ENDNOTES

1. The conceptualization of the public strategic planning process in this and the following chapters owes much to the prior work of Alan W. Steiss, Public Budgeting and Management (Lexington, Mass.: D. C. Heath and Company, 1972), particularly pp. 180-183, "A Framework for Strategic Planning."

CHAPTER 4. S1.0 BASIC RESEARCH STAGE

The purposes of this initial stage of the Strategic planning process are collection and analysis of information to (1) describe and understand past and present conditions, and to (2) build a foundation for the subsequent stages of forecasting, goals formulation and policies development. Depending on the strategic planning system of the organization, the research phase can be a very light or a very heavy responsibility. In some cases worthwhile strategic planning can be done "off the top of the head" with no (or little) data assembly. In many other instances, most of the important data sets required can come as by-products of other activities within and without the organization. In still other situations, data collections and analysis can be delegated and routinized inexpensively. On the other extreme, there will be jurisdictions where particular strategic problems will justify sophisticated techniques and major expenditures. Illustrations include annexation or consolidation, subarea revitalization, an infrastructure improvement with political-social-economic-ecological environmental effects, or a serious and persistent social problem (e.g. minority unemployment). Whatever the case, the research stage must not be treated as strictly mechanical. It is as creative as any other stage and the quality of its creativity will benefit all successive work. In preview, steps in the Basic Research Stage are outlined as follows:

- S1.1 Problem Analyses
    - S1.11 Problem Identification
        - S.111 Problem Definition
    - S1.12 Indicator System Design
        - S1.121 Organizational Performance
        - S1.122 System Performance
        - S1.123 Influencing Factors
    - S1.13 Indicator System Data (Calibration)
    - S1.14 Qualitative Factors
- S1.2 Subarea Data and Planning Horizon
- S1.3 Policy Inventory
    - S1.31 Inventory of Stated Goals and Policies of Community Groups
    - S1.32 Attitude Surveys
    - S1.33 Organizational Goals Structure

Figure 4-1 depicts the more important information flows between these steps and other governmental activites. The stage may be initiated through any one of its three principal elements. In practice, initiation most often occurs when a problem comes to the manager's attention and is recognized as having strategic implications (problem identification - Step S1.11).

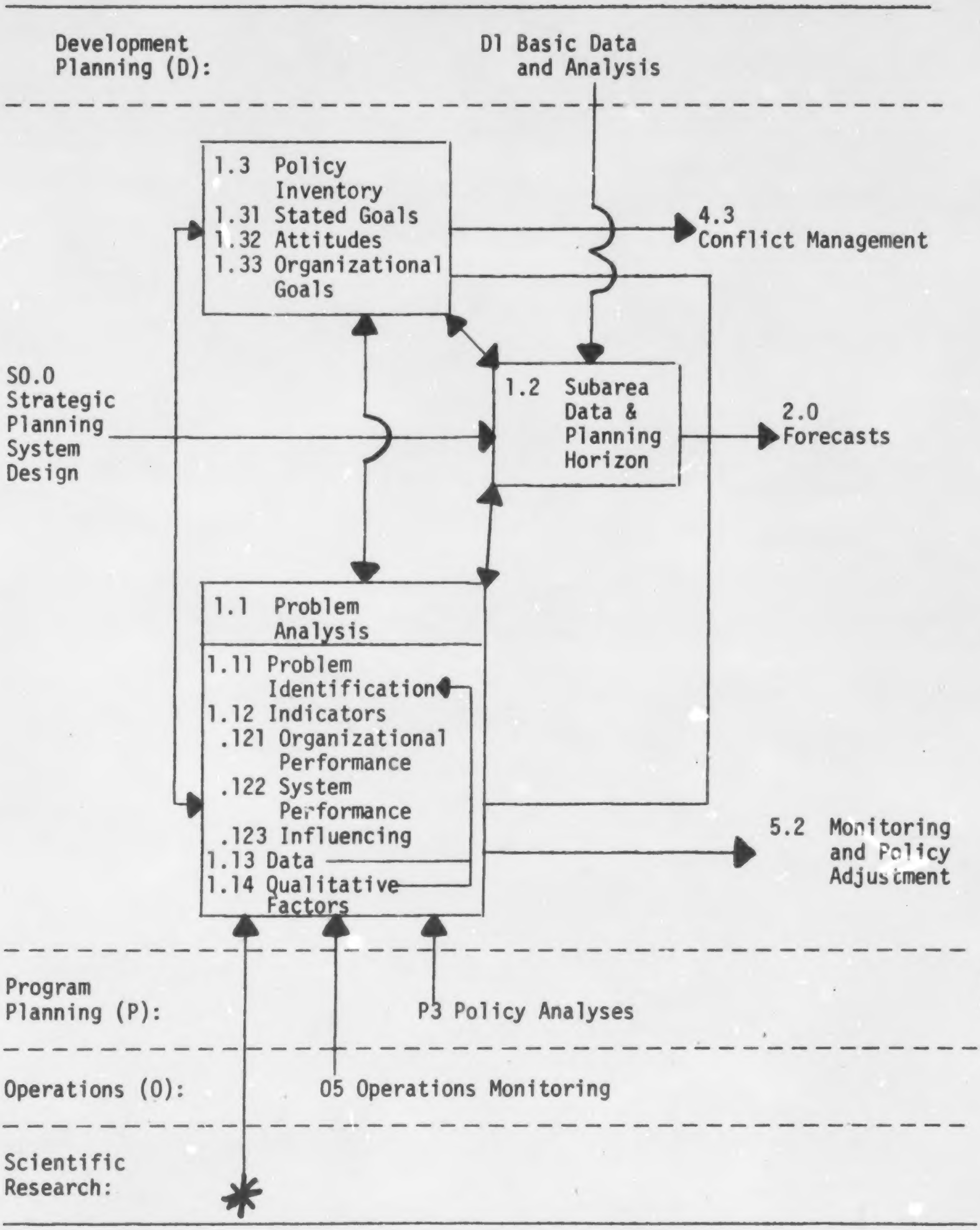
Development Planning (D):
D1 Basic Data and Analysis
1.3 Policy Inventory
1.31 Stated Goals
1.32 Attitudes
1.33 Organizational Goals
4.3 Conflict Management
S0.0 Strategic Planning System Design
1.2 Subarea Data & Planning Horizon
2.0 Forecasts
1.1 Problem Analysis
1.11 Problem Identification
1.12 Indicators
.121 Organizational Performance
.122 System Performance
.123 Influencing
1.13 Data
1.14 Qualitative Factors
5.2 Monitoring and Policy Adjustment
Program Planning (P):
P3 Policy Analyses
Operations (O):
O5 Operations Monitoring
Scientific Research:
*

FIGURE 4-1: Basic Research Stage (S1.0)

S1.1 PROBLEM ANALYSIS

The functions of Problem Analysis are fourfold:

(1) To diagnose the causal roots of community problems so that effective action programs can be instituted to resolve the problems,

(2) To identify key variables to establish a system of indicators so that dynamics of the problem can be better understood and progress toward problem resolution (goal achievement) can be measured, and

(3) To determine interrelationships between problems so that action programs can be effectively coordinated,

(4) To create the intra-organization, inter-agency and public communication, understanding and cooperation essential to effective action on the problems.

As suggested by Figure 4.1, good problem analyses can greatly increase the usefulness of subsequent work on forecasting, goals formulation, policy development and operations monitoring; indeed it may greatly improve the effectiveness of many of the local government programs. The eight Problem Analyses steps outlined above set the stage for a combining quantitative-qualitative aspects, as well as the technical and community involvement aspects to contingency forecasting and strategy planning. To accomplish this ambitious mission, the first two tasks, Problem Identification and Definition (S1.11 and .111) are more concerned with the inter-personal, inter-agency and community involvement aspects. The remaining steps (S1.12 to S1.14) are largely of a technical analysis nature.

S1.11 Problem Identification

The channels in which a "problem" comes to the attention of policy officials is worthy of study. Of particular interest is whether the channels are more open or more closed. Most officials, feeling deluged by problems, will first react, "the channels must be wide open." However, this feeling of ones work may be a major reason why "problem messages" do not get necessary attention. Another reason may be that the messages do not call for the kind of pre-programmed action that a government is ready to deliver. Many messages, in fact, are indicators of problems on the horizon, and can provide valuable lead time for strategic planning.

Concepts basic to problem identification are often not adequately understood. A PROBLEM is simply a SITUATION that falls short of someone's GOAL. In this sense, a goal is the DESIRED STATE of the SYSTEM, a concept synonomous with that of a strategic POSITION in military and corporate planning.

As an illustration, a downtown business district has a typical high traffic density that approximates the absolute capacity of the street system. It is definitely a situation but is it a planning problem? Is it a good or bad situation? The merchant whose sale attracted the extra cars may view the situation as good. So may the traffic engineer, proud of his planning accomplishments that make optimal use of the street system. Quite possibly, from their perspectives there is no real problem, because the street system is doing everything that can be expected of it. Then the owner of a choice business property is heard from. He points out that with a freeway ring road circling downtown, connected to well placed parking structures and areas, the number of shoppers and employees who could easily reach downtown could be increased 20%. A new goal, a desired state or position for the system has been introduced. Viewed in the light of this goal, the previously acceptable situation becomes a distinct problem.

Just as a GOAL/VALUE Perspective is needed to convert a "situation" into a "problem", a statistic has limited meaning unless viewed from a particular goal/value perspective. Is the capacity of the downtown street system to accomodate 30,000 vehicles per peak hour a good or a bad state of the system?

In Figure 4.1, the arrow connecting indicators and policy inventory is especially significant. A STATISTIC, no matter how valid, becomes an INDICATOR of use to the manager only when its relationship to a goal is established. The concept of a policy inventory (1.3) is based on the premise that the goal-component of the indicator system must be broader than the traditional professional concerns of agency heads. It must include the goals of community groups as they are accepted as organizational goals, or as system goals of concern to the local government.

Techniques for Problem Identification

Problems may be recognized by the manager himself or may be brought to his attention by his staff, elected officials or members of the public. The well organized local government will provide open channels for receiving complaints, requests and other problem messages, and among its arsenal of responses, will identify those that have strategic planning implementation.

Among those techniques that can be most useful in identifying problems for further attention are the following, which are described in Part III:

Advocacy Planning
Arbitrative and Mediative Planning
Attitude Survey
Community Technical Assistance
Coordinator-Catalyst
Fishbowl Planning
Hotline
Meetings - Community Sponsored
Meetings - Neighborhood
Meetings - Open Information
Neighborhood Planning Council
Policy Delphi
Workshop

S1.111 Problem Definition. The function of this step is communication -- production of a definitive to statement give all parties-at-interest a basic understanding of the problem and hopefully to generate a working concensus on the steps to be taken. A similar function is performed at the end of Alternative Policies Stage (S4.0) by "report and recommendations" and/or "environmental impact" statements.

For informing policymakers and the public, the Problem Definition may take a form similar to the "issue paper"[1] or "briefing paper". Such an instrument summarizes what is known about the problem faced by the community, including:

(a) reasons for concern,
(b) measures of the magnitude of the problem as faced by various publics in the population,
(c) the different perspectives from which different publics may view the problem,
(d) evidence as to its causal nature,
(e) present policy and its effectiveness,
(f) possible alternate actions and the groups espousing each, and
(g) issues which have developed or may develop.

The feedback arrow from S1.14 to S1.11 in Figure 4-1 indicates two points where a problem definition statement might be most useful. When prepared before the technical analytic steps (S1.12-.12) the statement might serve to provide the manager with the necessary information for determining whether analytic work should, in fact, be ordered. When done after the technical work it serves to brief him on the findings, facilitating his decision on further necessary actions. In either case he may want to circulate the document more widely to elected officials, department or agency heads or the general public.

S1.12 Indicator System Design

Complementing Problem Identification and Definition (S1.11 and .111), which are strongly participatory in nature, is PROBLEM MODELING, consisting of three technical steps, Indicator System Design, Data and Qualitative Factors (S1.121, .122 and .123). Problem Modeling addresses the first three functions listed above for Problem Analysis, which briefly recapped are:

(1) Diagnosing problem causes

(2) Establishing indicators, and

(3) Determining problem interrelationships.

A MODEL is a simplified, explicit representation of a real world situation, those factors that are considered to be the more important. Because a model is simplified and explicit, it makes possible two activites that are central to public strategic planning, and a third that is often valuable, but optional.

The first of the central activities is the exercise of interdisciplinary, interprofessional and/or interpersonal judgements. Dispassionate, objective, and constructive communication about complex, emotionally charged public problems is greatly facilitated by modeling. With modeling disagreements are more easier clarified and, hopefully, resolved. This feature of modeling can be the basis for a TASK FORCE approach to the problem, when a more concerted effort is required. More often the model simply makes for more precise and effective planning between the manager and his principal advisors.

Second, some of the same dynamics are at work in securing the involvement of other agencies and community interest groups. Techniques for doing this have been formulated.[2] The technique COMMUNITY TECHNICAL ASSISTANCE, described in Part Three, is a means for securing the participation of interested community groups in modeling. In many cases such participation may be vital to adequate analysis of the problem, leading to identification and qualification of key factors, and facilitating public understanding and support of the resulting public policies.

The third, and often optional, virtue of modeling is the way it lends itself to quantitative, mathematical analysis. Using mathematical models, the computer can perform calculations with a speed, capacity and economy that is beyond the reach of the human brain or desk calculator. Many local governments are already making use of computerized models for regional land use forecasting, traffic forecasting and control, financial forecasting and many other applications (See S2.1, Supporting Forecasts).

Whether or not the compute or calculator is used, the first step in modeling, after identification of the problem (S1.11) is design of the model (S1.12). Techniques for this purpose, including graphing of SYSTEM HIERARCHIES, ARROW DIAGRAMS, MATRICES, and HYPOTHESIS FORMULATION are discussed in Chapter 11. Basic to the purposes of Problem Modeling is an understanding of INDICATOR systems. Three relevant types of INDICATORS -- ORGANIZATIONAL PERFORMANCE, SYSTEM PERFORMANCE, and INFLUENCING FACTORS, are discussed next.

Should management decide that it is desirable to more carefully monitor the scope and nature of a problem (or conversely, the performance of a system) a set of indicators must then be designed (or redesigned, as the case may be). INDICATORS are statistical time series that (1) measure the achievement of the goals of an organization or system, or (2) measure factors that significantly affect organizational or system performance. A good analogy is the various dials and gauges on an automobile dashboard, or the control console of an airplane, that aid the driver/pilot to safely and effectively reach his goal. As implied in the above definition there are three types of indicators that are important to the manager of a local government: ORGANIZATIONAL PERFORMANCE, SYSTEM PERFORMANCE, and INFLUENCING FACTORS. Each of these is discussed briefly below.

S1.121 Organizational Performance. These indicators measure the degree to which the local government's policies, programs and projects are achieving their objectives -- i.e., perform their functions. For this reason, measures of organizational performance may also be termed "measures of effectiveness" (MOEs), "effectiveness indicators", "output variables", or "functional variables". When an indicator system has been established, officials monitoring local government operations can obtain data that provide a statistical time series depicting the current and past performance of the organization. For example, the School Board might measure its performance in the S.A.T. scores of its graduates, its retention rate, or the percentage of its graduates going on for college or vocational training.

The ability of PERFORMANCE INDICATORS to measure the goal-achievement performance of the organization or system with some objectivity is important to a manager/policy maker for two reasons. First, it enables him to confidently delegate the monitoring and interpretation of the indicator data. Secondly, it perfmits goals to be stated meaningfully, as measurable desired patterns of performance.

S1.122 System Performance. These indicators are similar in function to the measures of organizational performance, except that they apply to systems in which public policy has a concern, but over which government has only indirect control. A familiar example at the national level is the problem of inflation -- the purchasing value of the dollar. While the federal government can influence the cost-of-living indicator by controlling the supply of money, it does not have control over many other factors such as wage negotiations, oil and other raw material prices, or weather conditions (e.g., the Winter of 1977), which affect production. At the local level, government may affect air quality through the regulation of industrial emissions, but it cannot control temperature inversions and other climatic factors. There are an increasing number of problem areas toward which local government has been given responsibilities, but not controls; hence system performance indicators are required. The synonym "measures of effectiveness" is also in current use for these performance indicators, in as much as they reflect "the state of the system" at any given point of time in respect to its goals.

S1.123 Influencing Factors. Influencing factors are those elements in the system that affect organizational and system performance. They are often referred to as "input," "independent" or "intervening" variables. Illustrations of influencing factors may be found in the inflation and air quality examples above.

In the two preceding examples, since the governmental function is but part of a larger system, organizational performance is also an influencing factor. Put another way, influencing factors may be "UNCONTROLLABLE" "INDIRECTLY CONTROLLABLE" or "CONTROLLABLE" by public policy. When the latter two conditions hold, an indicator of organizational performance may also measure an influencing factor (in this case a "POLICY VARIABLE.")

For example, the amount of street repair work needed in a given spring will be a function of (influenced by) the condition of the pavement and subgrade in the fall, the amount of precipitation, freezing and thawing during the winter, and the weight and volume of the traffic. Among these influencing factors, the condition of the pavement and subgrade in the Fall would be usually largely determined by the amoung of street work done during the previous year(s) and the quality of the original pavement and subgrade, both of which can be affected by public policy and would therefore be organizational performance, as well as influencing, factors. This example illustrates three reasons why LEADING INDICATORS, the measures of influencing factors, may be important to the manager/policy maker, namely: "early warning", "influence mix", and prediction. More on these function of indicators of influencing factors:

(a) Early Warning. Changes in an influencing variable may pressure changes in system performance. Thus continuous monitoring of these variables may afford valuable lead time to prepare policy changes required to maintain system performance.

(b) Influence Mix. In those cases where the state of the larger system is influenced only indirectly by public policy and programs, the leading indicators may help in interpretating the mix of other influences so as to place the public role in perspective.

(c) Prediction. Analyses of the historic relationships between influencing and performance variables can improve forecasting future organization and system performance (2.0) given combinations of policy and other influencing variables. Use of the latter variables can be an important step away from old-style trend extrapolation forecasting.

The precise relationships between the influencing factors, as measured by their leading indicators, on the one hand, and the performance variables, on the other, are of great importance. Securing an explicit description of these relationships involves a process of HYPOTHESIS FORMULATION.[3]

S1.13 Indicator System Data (Calibration)

Historical data is needed to operationalize the indicators designed in the previous step. Time series statistics will describe the past and present state of organizational and system performance, and its relation to influencing variables, and thus provide background (though not always a "basis") for the projection of future trends. The system-monitoring nature of indicators requires that the requisite data be collected on a continuing or periodic way, rather than in a "one-shot" survey.

In modeling parlance the model designed in Step S1.112 is CALIBRATED in this step, which means that actual figures ("values" or "scale") are given to the previously defined factors and relationships. In applied modeling the figures needed to calibrate the model are derived inductively from the data using such techniques as regression.

S1.14 Qualitative Factors

Indicator systems by their nature inevitably emphasize quantitative (measurable) factors. However, there is a vast range of factors highly relevant to problem analyses and subsequent phases, but factors that are not readily quantifiable. These qualitative factors may include national or state legislation, local religious values, traditions, behavior, institutional ways of operating, the personalities of leaders, and many other influences that may "be part of the problem or part of the solution." These factors, although not as amenable to mathematical modeling must be given their appropriate weight in strategic planning.

S1.2 SUBAREA DATA AND PLANNING HORIZON

SUBAREA (e.g., Census tract, neighborhood, traffic zone, etc.) data are essential to the consideration of the spatial distribution of problems

(S1.1), community development (S2.2), community needs (S2.3), impacts (S4.2), participant groups (S4.3), and policies (S5.3). In many jurisdictions much, if not all, of these data are readily available from comprehensive community development planning (Figure 4-1), transportation studies or computerized management information systems. Several commercial data sources offer low cost information on annual changes in residential and employment characteristics, which can be used as "neighborhood/subarea" indicators.[4]

The "PLANNING HORIZON" principle functions as an important device for securing consistency and usability in analysis forecasting policies. The planning horizon is "the farthest point which can be anticipated based upon interpretations of what is presently known about development trends."[5] It deals with that level of population that will likely be achieved within the predictable future. This "horizon" level of population provides a common basis for all estimates of the need for public and community services, and as such, is an important factor in securing a balanced, integrated picture of the community future. The horizon must be close enough in time so that predictability within high confidence limits is possible, yet it must be far enough in the future to permit the implementation of strategies for achievement of community goals. The planning horizon yields a series of policy statements to guide long-range future growth and development toward a desired state in the system. The horizon is not a fixed point in time, but an anticipated population figure on which development of elements and strategies of the community can be based.

Steiss identifies three steps in setting the planning horizon: (a) basic data collection and inventories, (b) studies of the factors determining a planning horizon, and (c) identification of the planning horizon and levels of population to be served by the plan.[6] Information inputs from two other local government planning activities may greatly facilitate these steps and reduce the work needed to set the planning horizon.

The first of these is the basic studies (D1) conducted in connection with physical development planning. These studies are directly connected with the forecasting of future population and employment magnitudes and their distribution. Horizon planning concepts have been increasingly used in development planning. Hence, the research involved may have been fully relevant to strategic planning. This input is represented by the arrow in Figure 4-1.

Horizon setting may also benefit from the organization's experience with problem analyses (S1.1) and with forecasting (S2.0), also represented on Figure 5-1.

S1.3 Policy Inventory

Most local government managers and elected officials carry in their heads practical knowledge of the goals, values, attitudes of the various constituent groups in the community. Recently, in efforts to improve the process of policy making, consider the needs of all groups, and/or create a stronger sense of community purpose, many local governments have conducted "goals projects" and attitude surveys. All these efforts attest to the increasing importance attached to the "subjective", value components, of public policy, as contrasted with the technical components.

For the same reasons, systematic attention to community goals, values and related data is a vital input into strategic planning. Whether the effort is minimal, or more, it must be inductive, purposeful and systematic. The effort is inductive because goals and values are accepted as facts just as in any other phase of data collection.

The POLICY INVENTORY must be purposefully designed to serve its strategic planning functions: (a) to provide the goal component for the development of performance and system indicators, (b) to lay a factual basis for forecasting, (c) to aid in ranking alternative futures according to their desirability, (d) to identify anticipated, or desirable, value shifts, (e) to aid development of community involvement strategies, and (f) to aid in the evaluation of alternative strategic policies. Apart from its use in strategic planning the policy inventory may also prove valuable in short range policy making by providing officials with a better understanding of their constituent views.

The policy inventory must be systematic - well organized - to achieve these purposes. The richness and diversity of a community's value system, with all its constituent subsystems, is too great to be studied in any other way. Three complementary approaches to a policy inventory seem to be worthwhile in current practice. The first (S1.31) addresses the stated goals and policies of relevant community groups. The second (S1.32) uses attitude and/or opinion surveys to provide in-depth insights into real goals and values which qualify or add to the stated goals. Finally, the organization's own goal and objective structure, existing or potential, is a resource (S1.33) that is a useful frame of reference in a comprehensive strategic planning approach.

S1.31 Inventory of Stated Goals and Policies of Community Groups

"Groups" is used here in its broadest sense to include all relevant organizations, institutions, governmental jurisdictions and agencies, as well as citizen associations and demographic segments of the population. Source documents for this inventory may include constitutions and bylaws, recruitment brochures, speeches, programs of activities. These statements are analyzed for explicit and implied values and other content that relate to local government's policy concerns. All goals and values are accepted as legitimate for purposes of the inventory. Because of its nature it is important that no aura of secrecy be permitted to cloud this inventory and that its findings be public information.

1.32 Attitude Survey

Attitude surveys complement analyses of state goals (S1.31) by (a) providing insight into real goals and values and (b) more accurately reflecting the attitudes of a true cross-section of the citizenry through the use of scientific sampling methods. Attitude surveys for commercial product marketing and for political campaign planning have grown steadily in use and sophistication; their use in public policy planning is, by contrast, relatively slight. However, the potential is being recognized. The technique is described in Chapter 13. *

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*Chapter 13 can be found in Volume II, Technical Supplement.

1.33 Organizational Goals Structure

Many local governments have established a formal goals/objective structure as a basis for general planning, program planning, program budgeting, or management by objectives. In strategic planning such a goals structure may serve several functions, the importance of which is serving as a reference framework for analyses of the complex, diverse community value system, both existing and potential. For example, the goals structure can provide an ongoing framework for the analyses of stated and surveyed goals and values (S1.31 and S1.32). The structure, in turn, is tested and can be regularly improved through such analyses, and through the formulation of deductive goals (S3.2 and S3.4), so as to be more responsive to the needs and wants of all segments of the population.

ENDNOTES

1. "The Issue Paper" is Module Number Two of Curriculum Package VI, *Policy/Program Analysis and Evaluation Techniques*, prepared for the National Training Development Service.
2. For an example see "Secure Reactions to Display Models," Technique III/C in Douglas C. Smith, Robert C. Stuart, and Robert Hansen, *Community Involvement in Highway Planning and Design* (Blacksburg, Virginia: Center for Urban and Regional Studies, Virginia Polytechnic Institute and State University, 1975).
3. See Chapter 11 for techniques.
4. Notably, the R. L. Polk Company (city directories) and Dun and Broadstreet (credit ratings). See Participant's Workbook.
5. Steiss, *op. cit.*, p. 206.
6. *Ibid*. p. 206.
7. For example, see Gregory A. Daneke, "Community Evaluation: Survey Research and Citizen Involvement."

CHAPTER 5. ALTERNATIVE FUTURES STAGE

The purpose of this stage of the strategic planning process is to provide local officials with as clear a picture as possible of the probable future contests within which policies must be made or carried out. By enabling management to assess emerging needs, conditions and resource-shifts, forecasting facilitates action now, placing the local government in a strong position vis-a-vis the new situation. No one likes to be caught "out on a limb."

Important shifts and changes are constantly taking place within the local government, in the larger community, and in the general regional and national environment. Such flux occurs with astonishing rapidity these days. Within a short space of time the entire context for a local government policy or program may change in ways that are complex and unfamiliar. The purpose of forecasting is to anticipate these changes and enable the organization to be in as strong a position as possible to cope with the new situation.

The process of strategic forecasting in local government can be envisioned as shown in Figure 5-1. It is well to keep in mind that at the strategic level time and money is often better invested in several "ballpark" explorations of alternative futures than in a precise prediction of a single future. Typically the Scenario (S2.1) is most often used to examine alternative possibilities while Supporting Forecasts provide greater precision. There is a place for both in strategic planning, and both are discussed in this chapter.

S2.1 SUPPORTING FORECASTS

The forecasting tool that is of the most general use to public managers is the scenario, which has been utilized as the central step (S2.2) in the forecasting approach. Five forecasts which are often made by local governments are included as Supporting Forecasts (Steps S2.12 to S2.15). This forecasting approach is conceptualized in Figure 5.3. The five supporting forecasts are:

(a) Factors external to the governmental organization
    S2.11 Regional and National Factors Forecast (political-social-economic-ecological)
    S2.12 Community Land Development Forecast
(b) Organizational Factors
    S2.13 Community Needs and Demand
    S2.14 Organizational Development Forecast
    S2.15 Financial Forecast (expenditures and revenues)

The supporting forecasting steps are based on the five "administrative planning" steps (Figure 17-1) described by Parker in Managing the Modern City (International City Managers Association).[1] While local practice varies considerably, Parker's five steps provide a general representation of desirable

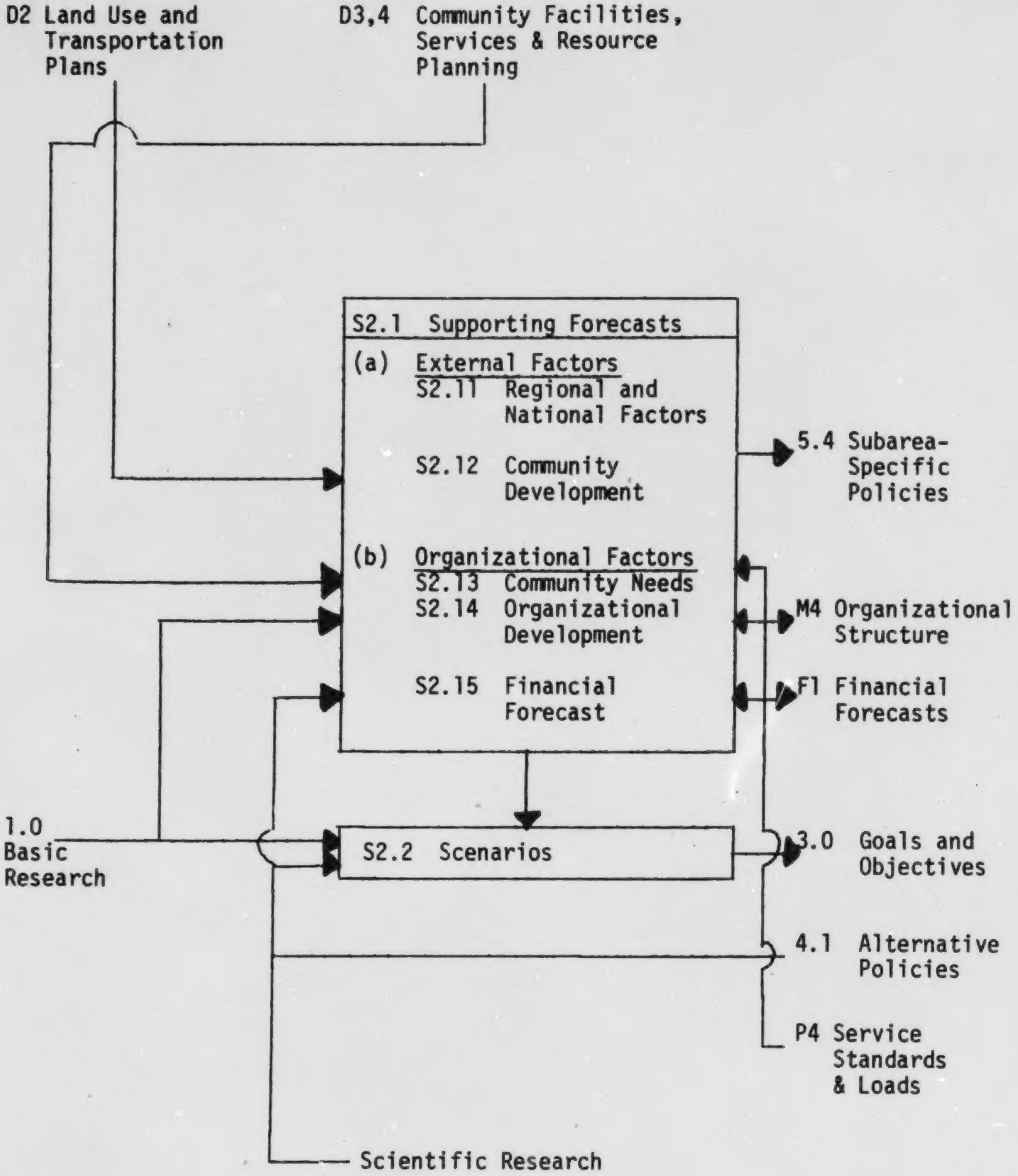
D2 Land Use and Transportation Plans
D3,4 Community Facilities, Services & Resource Planning
S2.1 Supporting Forecasts
(a) External Factors
S2.11 Regional and National Factors
S2.12 Community Development
(b) Organizational Factors
S2.13 Community Needs
S2.14 Organizational Development
S2.15 Financial Forecast
5.4 Subarea-Specific Policies
M4 Organizational Structure
F1 Financial Forecasts
1.0 Basic Research
S2.2 Scenarios
3.0 Goals and Objectives
4.1 Alternative Policies
P4 Service Standards & Loads
Scientific Research

FIGURE 5-1: Alternative Futures Stage (S2.0).

local government processes that permit us to see how the use of current forecasting technology can be used inexpensively to provide the setting for strategic policy-making. With this perspective in mind, Parker's five recommended "estimates of current conditions and forecasts of anticipated conditions" are examined, as steps S2.11 to S2.15. The five supporting forecasts serve as:

(1) A checklist of factors to be considered in scenario development.
(2) Analytic products which may be already available, and/or
(3) Forecasting activities that possibly should be undertaken.

Before discussing each of the supporting forecasts several comments should be made regarding (1) their technical and financial feasibility, (2) the availability of low-cost computerized techniques, (3) the importance of alternative futures reflecting different trend and policy sets, and (4) the comprehensiveness of the approach suggested for the supporting forecasts.

First, in regard to the technical and financial feasibility of the forecasts, it should be noted that many local governments already are obtaining or producing this information. Regional, national and environmental information (S2.11) is obtained by subscription, participation or research (e.g. from professional associations, federal agencies and the like community development forecasts (S2.12) are often prepared on a regular basis, often using computerized techniques. Similarly with the three organizational forecast steps: "quick and dirty" computer-based forecasts are increasingly being used.

Second, these simplified "quick and dirty" techniques, despite definite limitations, serve as useful function in strategic policy planning. They can quickly and inexpensively suggest the implications of a particular trend or policy set.

Third, the fast, low-cost character of many of the computerized forecast techniques permit examination of the relative effects of alternative policy sets. A single future context for local policy-making cannot be forecast with any high degree of certainty. However, possible futures, each having a degree of probability, can be visualized by identifying the important policy and influencing variables (S1.12). With this information, the policy maker will be better prepared for placing his governmental organization in a strong position to cope with the anticipated conditions.

Finally, it should be noted that this is a holistic forecasting approach that probes the effect on the total organization of all significant external and policy factors. With these comments in mind, the five supporting forecasts can now be examined.

S2.11 Regional and National Factors Forecast

The function of this forecast is to anticipate the future state of extra-organizational factors having significant effects on the community and the organization. These include a wide range of political, social, economic, and environmental factors (PSEE) that will affect the community and the organization, such as: air pollution, water supplies, and natural resources; expected changes in state and national legislation, regulation or programs (e.g., revenue sharing); trends in employment and the economy of the region and nation; major changes in programs or services by other governmental agencies or public utilities; traffic trends and improvements; annexation and consolidations, etc. Description and forecast of these factors will improve the reliability of the other four forecasts, and permit identification of possible changes in goals, and in policy and programmatic responses, that should be considered.

S2.12 Community Land Development Forecast

The function of this forecast is to anticipate the future development of the community, in the light of regional and national influences, in such a way that estimates of future needs or demands for public services and facilities can be derived.

In many jurisdictions, or in metropolitan planning organizations, this forecast is being regularly made by land use planners as a basis for calculating the need for additional public facilities and services. The forecasts are updated periodically -- annually, biannually or semi-decennielly -- and for small areas -- e.g., census tracts -- to provide such variables as population, employment, and number of dwelling units. While in small communities population and employment forecasts can still be prepared by hand, most larger urban areas are now using their computer facilities for this task. The computer saves money and time, permits easy updating, and allows the rapid assessment of the effects of alternative policies and trends. The latter consideration is of increasing importance. The results of these short-range community development forecasts are usually also sought by utilities, retailers, churches and other market-oriented and service area-oriented groups.

S2.13 Community Needs Forecasts

The function of this forecast is to estimate the level of facilities and services that the jurisdiction may be called upon to provide, based on the forecasts of regional and national changes, and community population and employment shifts. The estimates cover all needs -- such as schools, sewage treatment, water supply, housing quality, recreation program participants -- for which appropriate quantitative standards are available. The availability of these standards permits the Community Needs Forecast to be inexpensively derived by computer from the Community Development Forecast. The Program Analyses (S1.1) would be a source for these standards, as well as for goal decisions that the standards can and should be changed (3.0).

S2.14 Organizational Development Forecast

The function of this forecast is to anticipate, in the light of the preceding needs forecast, the size, structure, skills, training and management development that will be required. This forecast addresses the question of the changes in organization that may be due to changes in the need for and the demand for public services and facilities, and other factors, such as annexations or consolidations. Since this forecast may be concerned with changes in the number of employees and in organizational structure required, it often is not available to the public.

S2.15 Financial Forecast

The function of the financial forecast is to project in the light of the preceding forecasts, the required expenditures and the anticipated revenues, and determine the extent of the gap between these. Projection of the tax base (property, retail sales, employment, etc.) may be based on the community development forecast. The forecast provides officials with a basis for future commitments and indications of the amount of "belt-tightening" that may be needed.

The Financial Forecast completes the five supporting forecasts. As noted earlier these forecasts often may be information already available, sometimes studies prepared particularly for strategic planning, and always a checklist of factors for possible inclusion in scenarios.

S2.2 SCENARIOS

The function of the scenario is to integrate the pertinent future developments into a condensed and summarized version for busy policymakers and citizens. Pertinent events to be included in the scenario can be drawn from the Supporting Forecasts (S2.1), when these have been make, and/or from other sources. In any case they should be tempered with management's reasoned judgement of what a possible, relevant and coherent future might be like. Scenario has come to mean a word picture of some future time, optionally including a discussion of the events (assumptions) that lead to the situation depicted. To be plausible the scenario must describe an internally consistent set of forecasts. Horizon planning provides one means for obtaining such internal consistency.

A scenario is an advantageous way to "package" a computer or other detailed, technical forecast. For the non-technical policymaker, it can highlight the most relevant data, interpret these data, make data adjustments, include qualitative forecasts (including value and goal shifts), and present the results in a highly readible and comprehensive form.

Another advantage of the scenario is that two or more alternative futures, each with a degree of probability, can be prepared in a relevant, readible format for policy officials and the public in order to open up thinking and discussion of possible contingencies and appropriate policy responses.

Community Involvement Techniques For Forecasting

The following are among the techniques most frequently used for strategic forecasting. Descriptions will be found in the chapter indicated in parenthesis.

(a) Most often used

Delphi (Chapter 12)
Scenario (Chapter 12)
Task Force (Chapter 13)

(b) May be used

Advocacy Planning (Chapter 16)
Technical Assistance (Chapter 16)
Coordinator/Catalyst (Chapter 15)
Fishbowl Planning (Chapter 14)
Workshop (Chapter 10)

ENDNOTES

1. John Parke, "Administrative Planning", Chapter 10, in William Goodman (ed.), Managing the Modern City (Washington, D. C., 1970).

CHAPTER 6. GOALS AND OBJECTIVES

The purpose of this stage is to define a desirable state of the system -- the level of goal achievement that is considered a solution to the problem, identified in the research stage. The focus initially in this stage is not on "What do people want" (their present goals) but "What goal will best solve the problems." Goals are cast in the form of desired changes in behavior, the attainment of which are measurable by performance indicators. These are "deductive" goals in contrast with the inductive goals surveyed in the research stage.

Stress is placed on the word "initially" in the preceding paragraph because, on iteration, the final, adopted policy has to be some compromise between what people want and what will solve their problems. In other words, the policy has to be both politically and technically feasible. However, thanks to the capacity of people to learn and change, neither of these conditions need necessarily be sacrificed.

The inductive goals inventoried in Stage 1 are not adequate to guide community and organizational development toward a desirable state. Neither are the value shifts and goal changes forecast in Stage 2. In the first instance, inductive goals may not allow for the changed behavior required to resolve a problem. In the second instance, the forecasted value shifts may also be contrary to problem resolution. Hence, "deductive goals" describing a realistic ideal "state of the system" are essential. The various forecasts of possible futures, made in Stage 2, provide bases for deductive goals, but still lack the value analyses and judgements as to what constitutes the desired future. As Steiss has written:

> A survey of the planning literature demonstrates that the methodologies most often employed in the process of goal formulation build upon an inductive approach. These methods are usually based on a survey of public attitudes, opinions, and objectives. In application, these techniques seem to lead to such self-evident objectives as the desire for decent housing, beauty in the environment, the elimination of pollution, economic opportunities, and so forth.
>
> In the systemic model for strategic planning, a deductive approach replaces more typical inductive techniques. Through the use of a deductive approach, the planner's task becomes one of forming tentative goal sets and effectiveness measures and testing them in the context of a specific population, thus allowing new factors to emerge. In this manner, the goal formulation process becomes an educational device as well as a political tool. It increases the awareness of the population with respect to the changes that may be taking place in society, but also allows the population to react to these changes in accordance with their own values, norms, and expectations. The set of goals which eventually emerges

through this process of testing and feedback should be representative in general of the attitudes of the specific community and, in particular, of its level of tolerance with respect to change in values, norms, customs, and the modernization of institutions.

The process of goal formulation must be addressed to the changing patterns in society, rather than acting merely as an extension or reflection of past or present trends. The model for strategic planning proposed here requires the development of hypothetical goal sets based on trends in society at large. The formulations are followed by the application of tests to determine the acceptability of these goals by the specific population.

Figure 6-1 conceptualized this approach to deductive goals. Two steps - S3.1. Appraisal of the Goals Context, and S3.2. Initial Formulation of the Desired State - lead to the trial, or "hypothetical formulation" of goals in this stage. In the following stage - S4.0 Alternative Policy Responses - these hypothetical formulations are tested for technical and political feasibility, and fed back to the Goals and Objectives Stage as step S3.4 Redefinition of the Desired State. Step S3.3 Revised Organizational Goals Structure is a basic input to the formulation and updating of an effective program structure (P1).

S3.1 Appraisal of the Goals Context

The function of this step is to define the context for goal formulation. The product should be an explicit set of premises, based on a selected scenario (S2.2) and having significant implications for the formulation of deductive organizational goals(desired state of system performance (S3.2)).

The longer-range goals of the organization can not be considered separately from those of the community which it serves nor separately from the total context of an assumed future. Much of the possible future context for deductive goals will have been developed by the Forecasting State (2.0). What is required in step 3.1 is the setting of assumptions concerning probable structural changes in the community that will change the constraints on the organizations goals. This process has four interacting dimensions represented in Figure 6-2.

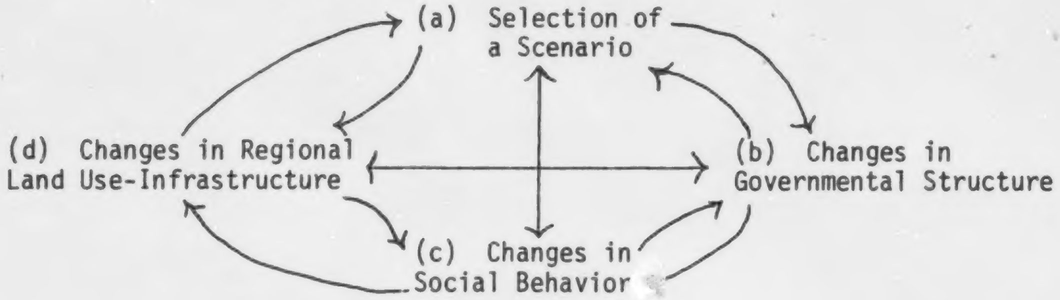
(a) Selection of a Scenario
(d) Changes in Regional Land Use-Infrastructure
(b) Changes in Governmental Structure
(c) Changes in Social Behavior

Figure 6-2. Dimensions of the Appraisal of Goals Context

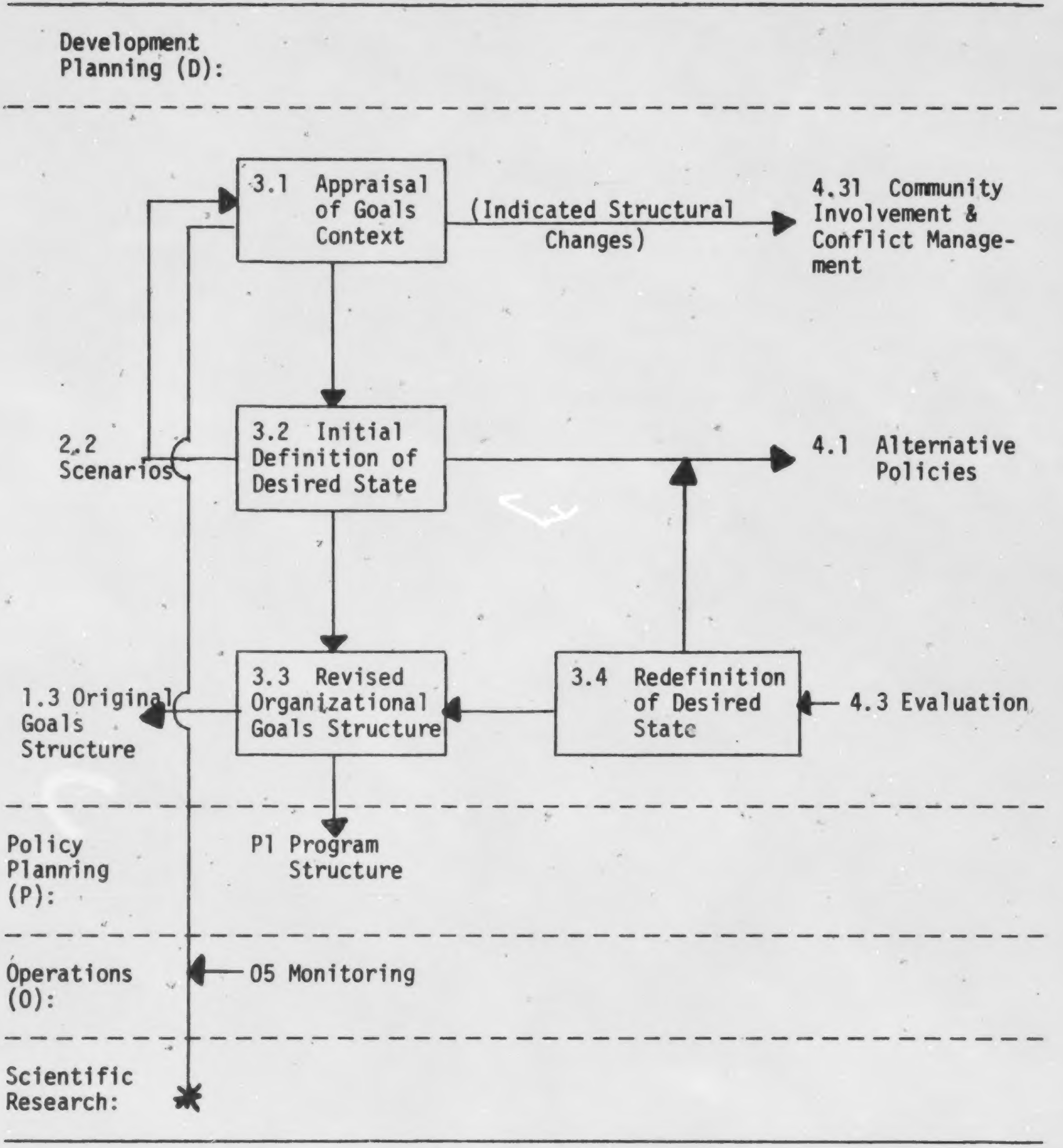
Development Planning (D):
3.1 Appraisal of Goals Context
(Indicated Structural Changes)
4.31 Community Involvement & Conflict Management
2.2 Scenarios
3.2 Initial Definition of Desired State
4.1 Alternative Policies
1.3 Original Goals Structure
3.3 Revised Organizational Goals Structure
3.4 Redefinition of Desired State
4.3 Evaluation
Policy Planning (P):
P1 Program Structure
Operations (O):
O5 Monitoring
Scientific Research:

FIGURE 6-1: Goals and Objectives Stage (S3.0).

(a) Selection of Forecasts. -- Formulation of goals and objectives must be in response to a specific future. Selection of a scenario from among those developed in step S2.2 is facilitated by a two-dimensional Probability/Desirability Matrix for ranking alternative futures. One dimension indicates the probability of the particular future occurring, and the other dimension reflects its desirability in terms of present goals. The work of developing goals and policies promises to be most productive for a future that ranks high on both scales.

The selected forecast will likely have identified structural changes to be evaluated in Substeps (b), (c) and (d) for their effect on the organization's goal-setting capacity.

(b) Changes in Governmental Structure. -- Changes in the relation of the organization to other governmental levels and jurisdictions will likely strengthen, weaken or otherwise condition the capacity to set responsible goals -- goals that represent a realistically achievable, as well as a desirable, state of the system. Governmental structural changes may include such events as annexations, consolidations, emergence of a new suburban municipality, creation of an independent metropolitan district or authority, a new revenue-sharing act, or other changes in federal or state policies affecting local government.

(c) Changes in Social Behavior. -- Changes in patterns of mass behavior, like changes in political organization, can affect the organization's capacity to achieve a particular desired state of the system. Social changes may also require that attention be given to new policy areas. For example, will the increased numbers of working women force increased provision of day care centers? How will further shortening of the work week affect the demand for public recreation? How will the emergence of new "family types" affect demands for a greater diversity of residential subareas?

Many of these structural changes may become goals of community groups or various types. They are goals beyond the power of the organization to directly set; nevertheless they may have a major influence on organizational goals.

(d) Changes in Regional Land Use-Infrastructure. -- For example, in the past people sought residential locations that were close to their place of work. However, changes in transportation and communications have enabled more persons to choose locations based on neighborhood qualities and ammenities at the cost of increased travel. In the future what will be the effect of energy constraints on future regional patterns? The effect of inflation-induced austerity in levels of living?

To summarize Step S3.1, identification of possible structural changes is important because they may aid or hinder achievement of organizational goals. The deductive nature of the analyses to be made at this point should be stressed. There will be a reasoned prognosis, since even a complete historical data set is not adequate for judging future developments. Some changes can be expected that are so revolutionary that information on past trends will often be of limited value. The qualitative forecasts in the scenarios (S2.2) should help by suggesting new factors emerging from, and in, the changing patterns of society so that future goals and demands are not mere extensions of the present, as Steiss stresses:

> The crucial task is to predict the future desires and needs of people and establishments and the possibility of satisfying those desires within the limitations imposed by technical, economic and social developments and public policies in general.[7]

S3.2 INITIAL DEFINITION OF THE DESIRED STATE

The function of this activity is the formulation of a set of goals that will stand the best chance of resolving the problems under concern. This desired state of the system is represented by a set of projected institutional and social behaviors that are internally compatible and are related in the performance indicators as objectives.

S3.3 REVISED ORGANIZATIONAL GOALS STRUCTURE

The Organizational Goals Structure (S1.33), which is based primarily on existing organizational programs, may require modification to accommodate the deductive goal sets resulting from the strategy planning process. Such modification would normally be finalized after policy plan selection (S4.32).

S3.4 REDEFINITION OF THE DESIRED STATE

The activities in Stage 4 will indicate the modifications which must be made in the desired state in order to have a viable strategic policy, one that has, or can have, workable public support. By this point in the process the selected goal set will have been linked with at least one policy that is expected to achieve the desired system state. The selected goal-policy should be adopted by the governing body as part of the policies plan for the organization.

COMMUNITY INVOLVEMENT TECHNIQUES FOR DETERMINING GOALS AND OBJECTIVES

While the setting of realistic performance objectives is often a highly technical, managerial act, the whole subject of goals is highly sensitive to public opinion. Techniques suitable for community involvement in goal and objective formulation and described in Part IV. The following list is selective and indicates the Chapter containing the description.

(a) Most often used

- Attitude Surveys (Chapter 13) *
- Technical Assistance (Chapter 16) *
- Coordinator/Catalyst (Chatper 15) *
- Fishbowl Planning (Chapter 14) *
- Neighborhood Planning Council (Chapter 16) *
- Task Force (Chapter 13) *
- Workshop (Chapter 10) *

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*These chapters can be found in Volume II, Technical Supplement.

(b) May be used

Advocacy Planning (Chapter 16) *
Arbitration/Mediation (Chapter 15) *
Citizen's Advisory Committee (Chapter 14) *
Policy Delphi (Chapter 12) *

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*These chapters can be found in Volume II, Technical Supplement.

ENDNOTES

1. Alan Walter Steiss (Public Budgeting and Management. Lexington, Mass.: D. C. Heath and Company, 1972) pp. 210-211.

2. Steiss, op. cit., p. 214.

CHAPTER 7. ALTERNATIVE POLICY RESPONSES

The purpose of this stage is to formulate and evaluate the range of possible policy alternatives that could achieve the desired state defined in steps S3.2. Policies focus on the directly and indirectly controllable variables (S1.12). A strategic policy is a general guide to more detailed program and project policies, and through them gives day-by-day governmental actions the consistent, purposeful thrust required for problem solution and goal achievement. Formulation of policy alternatives is accomplished in sequential steps, as follows:

(1) Alternative Policies (Formulation)
(2) Impact Assessment (Testing)
(3) Evaluation

As shown in Figure 7-1, policies are recycled back to Alternative Future (S2.11 to S2.15) to test their effect on the future, and back to Goals and Objectives (S3.4) for revision of objectives and policies, until a policy plan, or component thereof is selected for refinement and implementation (S5.0).

S4.1 ALTERNATIVE POLICIES

The function of this step is to formulate the range of policy responses (strategies) appropriate to the particular future (3.1) and goals set (3.2). While policies may frequently be designed and tested to cover a limited goal or problem situation, the total policy set of the organization must be cross-checked to achieve synergy and prevent destructive conflicts. Each policy must answer basic questions such as: (1) what is to be accomplished (objectives), (2) where it is to be accomplished (focus), (3) how it is to be accomplished (means), (4) priority and (5) standards of accomplishment.[1]

In theory, the more options available to the decision-maker the better the decision. In practice, the development of alternative policies is constrained by limitations of time, money, information, skills and the wisdom of not pursuing further development of a policy option that is clearly inferior to another alternative.

It is well to employ a systematic approach to formulation of a range of alternatives. One paradigm is to probe for policy options to embrace various points on a continuum of means.[2] Another paradigm is to seek a "straddle" on the best policy and then "narrow in" through a "test-replan" cycle. A number of paradigms for citizen involvement in the formulation of alternatives are also available. Techniques embracing these paradigms are discussed in more detail in Chapters 9 and 14.

The alternative policies would then be tested through two channels: (1) By interating the policies through the forecast procedures (S2.0) whenever these are appropriate, and (2) by special impact assessment

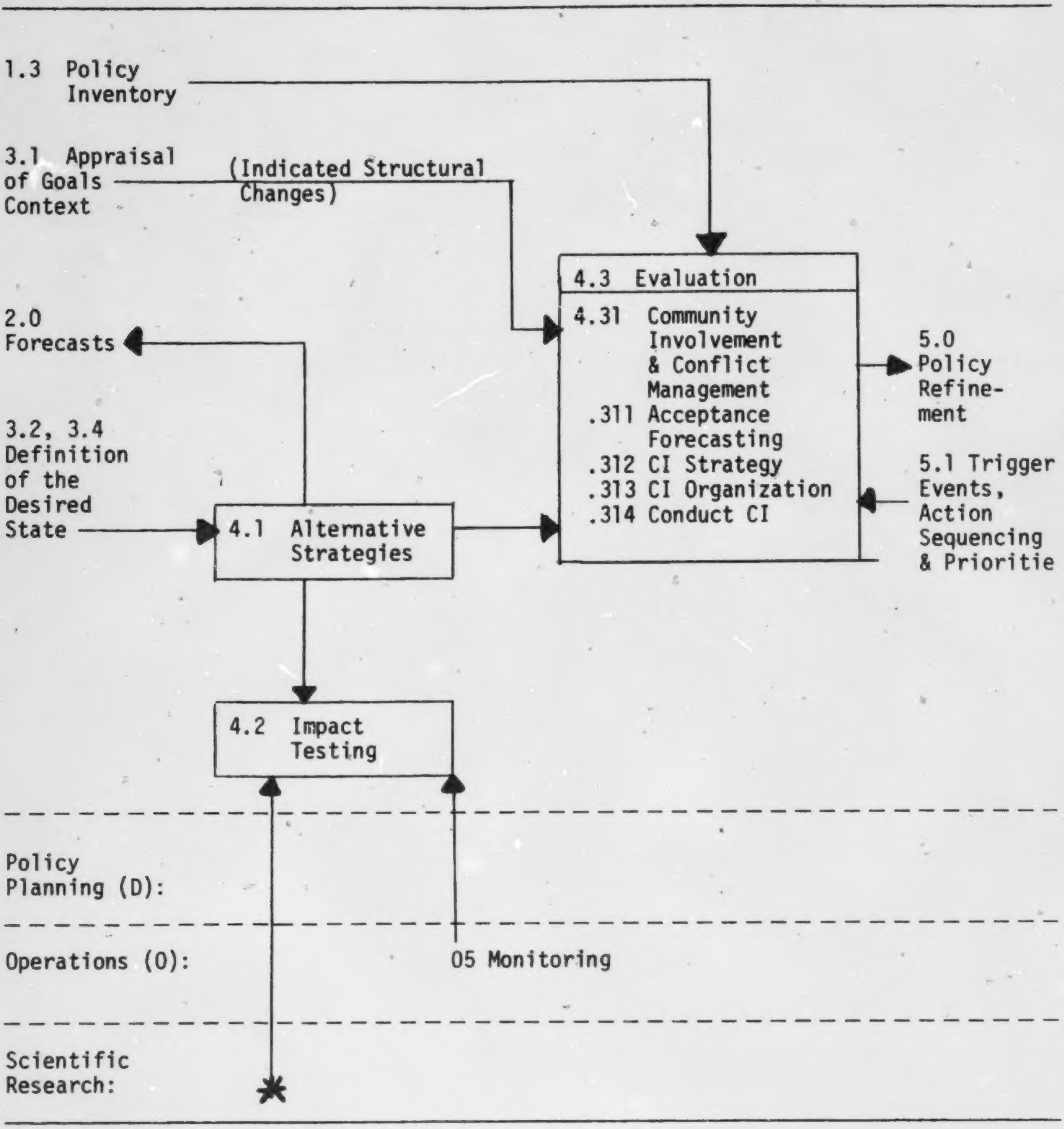
1.3 Policy Inventory
3.1 Appraisal of Goals Context
(Indicated Structural Changes)
4.3 Evaluation
4.31 Community Involvement & Conflict Management
.311 Acceptance Forecasting
.312 CI Strategy
.313 CI Organization
.314 Conduct CI
2.0 Forecasts
5.0 Policy Refinement
3.2, 3.4 Definition of the Desired State
4.1 Alternative Strategies
5.1 Trigger Events, Action Sequencing & Prioritie
4.2 Impact Testing
Policy Planning (D):
Operations (O):
05 Monitoring
Scientific Research:
*

FIGURE 7-1: Alternative Policies Response Stage (S4.0).

procedures (S2.0) whenever these are appropriate, and (3) by special impact assessment procedures (S4.2) where desired. For example, suppose that in an urban area the goal is set in step 3.2 to maintain the transportation system operating at service level "B" (traffic free flowing at a minimum speed of 45 mph 95% of the time). In the Alternative Policies step (4.1) it is determined that this desired state of the system might be sought through the four following alternative strategies:

(1) Additions to the freeway system.
(2) A rail rapid-feeder bus system.
(3) An arterial-bus-traffic improvement system.

Each of these could be tested through the regular forecasting steps (S2.0) for cost, effectiveness, influence on regional form and infrastructure, etc. Special impact assessment procedures (S4.2) might be needed to determine available technology, air and noise pollution, and public reactions. Alternative Policies is generally one of the most important community involvement steps.

S4.2 Community Involvement Techniques for Strategy Formulation and Testing

The policy formulation stage has been a popular one for interagency and community participation. Techniques for involvement are described (elsewhere in) Manual, as follows:

(a) Most often used

Advocacy Planning (Chapter 16)*
Technical Assistance (Chapter 16)*
Coordinator Catalyst (Chapter 15)*
Fishbowl Planning (Chapter 14)*
Neighborhood Planning Council (Chapter 16)*
Policy Delphi (Chapter 12)*
Task Force (Chapter 13)*

(b) May be used

Citizens Advisory Committee (Chapter 14)*
Workshop (Chapter 10)*

S4.2 IMPACT ASSESSMENT

The function of this step is to provide the manager and others concerned with policy evaluation with as complete a picture as is feasible and necessary of the consequences of each policy. Feasibility is generally determined by the funds and assessment technology available. Necessity is typically established by the seriousness with which significant interested parties hold the alternative. Conversely, the strategy need not be tested further if there is general acceptance of the opinion that it fails important criteria.

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*These chapters can be found in Volume II, Technical Supplement.

Impact Assessment is a complementary step to the recycling of an alternate policy through the Forecast (S2.0) stage. Both activities may engender widespread and intense interest from affected parties and therefore should usually be coupled with community involvement. The results of these activites will be quantitative scores, categorized impacts, or forecasted performance ratings for the major impacts of serious policy alternatives.

S4.3 EVALUATION

The function of the Evaluation Step is to carefully appraise the results of the previous technical and participatory activities against (a) the present and potential goal-value sets of the groups-at-interest and (b) the deductive goals so as to select the most technically and politically feasible policy plan or plan component. The Evaluation step has two principal substeps, S4.31 Community Involvement and Conflict Management and S4.32 Plan Selection.

S4.31 Community Involvement and Conflict Management

The function of this activity is to devise and implement an appropriate participatory review of all relevant information previously developed in the process and to find means of reconciling insofar as possible that goal conflicts of the groups-at-interest. The focus is on the multi-group, multi-goal conflicts typically inherent in public policy-conflicts with which public management must cope.

Figure 7-1 by representing Community Involvement and Conflict Management as a sequential step, does not tell the whole story. It is true that the evaluation step in a public decision process is the point at which conflicts are most intensely dramatized. What the diagram fails to convey is unless group and goal conflicts are adequately addressed in other phases of the strategic planning process there is little hope of resolving them at the evaluation step.

Community Involvement and Conflict Management (S4.31) typically has four aspects or substeps:

S4.311 Acceptance Forecasting - use of matrices or other devices to predict and pinpoint the public acceptance problems and issues that can be anticipated for a particular policy proposal.

S4.312 Community Involvement Strategy Formulation - selection of the principles and techniques for the participatory aspects of the SP process.

S4.313 Organization for Community Involvement.

S4.314 Conduct of Community Involvement Activities.

S4.311 Acceptance Forecasting. The function of this substep is to predict the groups and goals that will be affected by a particular future-goals-policy package. This permits an assessment of the degree of ease or

Policy Delphi (Chapter 12)*
Task Force (Chapter 13)*

(b) May be used

Advocacy Planning (Chapter 16)*
Neighborhood Planning Council (Chapter 16)*
Workshop (Chapter 10)*

S4.313 Organization for Community Involvement. The function of this step is to devise the most effective channels for participation of affected groups in the strategic planning process. The channels must provide for open, legitimate communications with all policy officials. Most local government organizations do not have channels for participation that fully meet these requirements, but experimental and incremental steps are being taken in many jurisdictions.

S4.314 Conduct of Community Involvement. The function of this activity is to secure effective participation of all affected groups at all appropriate steps of the strategic planning process. Principles of and techniques for doing this are outlined in Chapter 9.

S4.32 Policy Selection

The function of the Policy Selection step is to determine which goal-policy sets best meet the criteria of political and technical feasibility and can be selected as the jurisdiction's policy plan, or as a component of the plan. This is an important, top-level, decision step. Does the policy satisfactorily meet the feasibility criteria? Would further recycling be worth the effort? How does the policy component relate to other policies?

Answers to the last question will often depend on the results of steps S5.1, Trigger Events, Action Sequencing, and Priorities. In these cases the policy may be given tentative approval subject to the findings of S5.1, on the order of the steps can be reversed.

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*These chapters can be found in Volume II, Technical Supplement.

ENDNOTES

1. Alan Walter Steiss, Public Budgeting and Management (Lexington, Mass.: D. C. Heath and Company, 1972), p. 25.

2. Steiss, op. cit., p. 26.

3. Steiss, op. cit., p. 20.

4. Steiss, op. cit., p. 25.

5. Steiss, op. cit., p. 24.

CHAPTER 8. POLICY REFINEMENT

The purpose of this "final" stage of the strategic planning process is to monitor actual events indicating the future that is in reality developing, and to detail and further test the policy responses appropriate to the indicated contingency and subarea situations. Two important activities at this stage (Figure 8-1) are translation of the selected and contingent strategic policies into program policies and development policies. Neither of these activities are, strictly speaking, part of strategic planning and therefore will not be discussed in the technique section. However, both are already familiar to public managers and their advisors, and both subjects are well covered in available literature.

Discussed below are four activities associated with the refinement of strategic policies, namely:

S5.1 Trigger Events and Action Sequencing
S5.2 Monitoring and Policy Adjustment
S5.3 Pilot Studies
S5.4 Sub-Area Specific Policies

S5.1 Trigger Events and Action Sequencing and Priorities

The function of this step is to link possible futures in realistic sequences through pre-determined "trigger events." Trigger events are the points on projected readings from indicators at which one future is considered to have shifted to another, signaling the need to consider a change in public policies. The indicator data may tell of a rise in unemployment, an increase in street crime, or a neighborhood transition from older residents to households with female heads. Sometimes the statistics may be accompanied by a dramatic, public-arousing event such as a hideous crime or an energy shortage. Often, however, the indicators can give advance warning of emerging problems and public concerns. In any case, the trigger event is a pre-identified statistical point indicating at which policy is to be adjusted or, at least, reviewed.

Action sequencing is a complementary concept. It consists of the preceding-succeeding relationships between policies that are linked by trigger events. A laissez-faire policy toward gasoline consumption might be followed by gasoline rationing during a gasoline shortage, which might in turn be followed by tax on heavy automobiles during the period when exhaustion of petroleum reserves is more imminent. In this type of situation indicators of attitude changes will also be of great importance: Are the auto industry and the public ready to accept the proposed measures?

Priorities governing strategic planning must be developed and applied at a number of points in order to direct the work effort into the most productive channels. Hard choices must be made since there are an infinite difficulty in securing acceptance, and a pinpointing of the anticipated problems and issues.

Matrices, sometimes computerized, are used for this purpose. "The basis for the identification of conflict situations is a multi-dimensional goals matrix through which basic conflict areas are given more specific recognition."[3] In addition to the goals-policy package, a major input into the matrix is the Policy Inventory (S1.3). The matrix may take one of several forms. Steiss' Multi-Dimensional Goals Matrix, shown in Figure 7-2, suggests the variety of goals impinging on a particular policy problem. The matrix applied to a specific policy alternative will highlight conflicts that may develop between the total goal sets of community parties-at-interest and the value impact potential of the alternative. Some areas of conflict will be institutional goals versus public goals, and divisions between social, environmental, economic and political goals. The matrix will provide a scorecard of goals and highlight the conflicts that exists between them. There will also be conflict at the geographic area in the state, regional, and national levels. The general hypothesis that underlies the goals matrix suggests that information regarding internal individual conflict among the goal sets will be valuable for identifying level of comprehension with respect to complex developmental issues.[5]

	Institutional			Public (Individual)		
	State	Region	National	State	Regional	National
Social						
Environmental						
Economic						
Political						

FIGURE 7-2. Multi-Dimensional Goals Matrix[4]

S4.312 Community Involvement Strategy Formulation. The multi-dimensional goals matrix make it possible to predict the "impact level" (conflict level) of a particular goals-policy alternative. The amount and type of community involvement required will vary direclty with the level of input. These requirements can then be met by an appropriately designed community involvement program to be integrated with the next iteration of the SP process. The program will usually consist of some adaptation of the community involvement techniques described in Chapters 9 through 16. Techniques most often used, and the chapters where they are described, are:

(a) Most often used:

Arbitration/Mediation (Chapter 15)*
Technical Assistance (Chapter 16)*
Coordinator/Catalyst (Chapter 15)*
Fishbowl Planning (Chapter 14)*

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*These chapters can be found in Volume II, Technical Supplement.

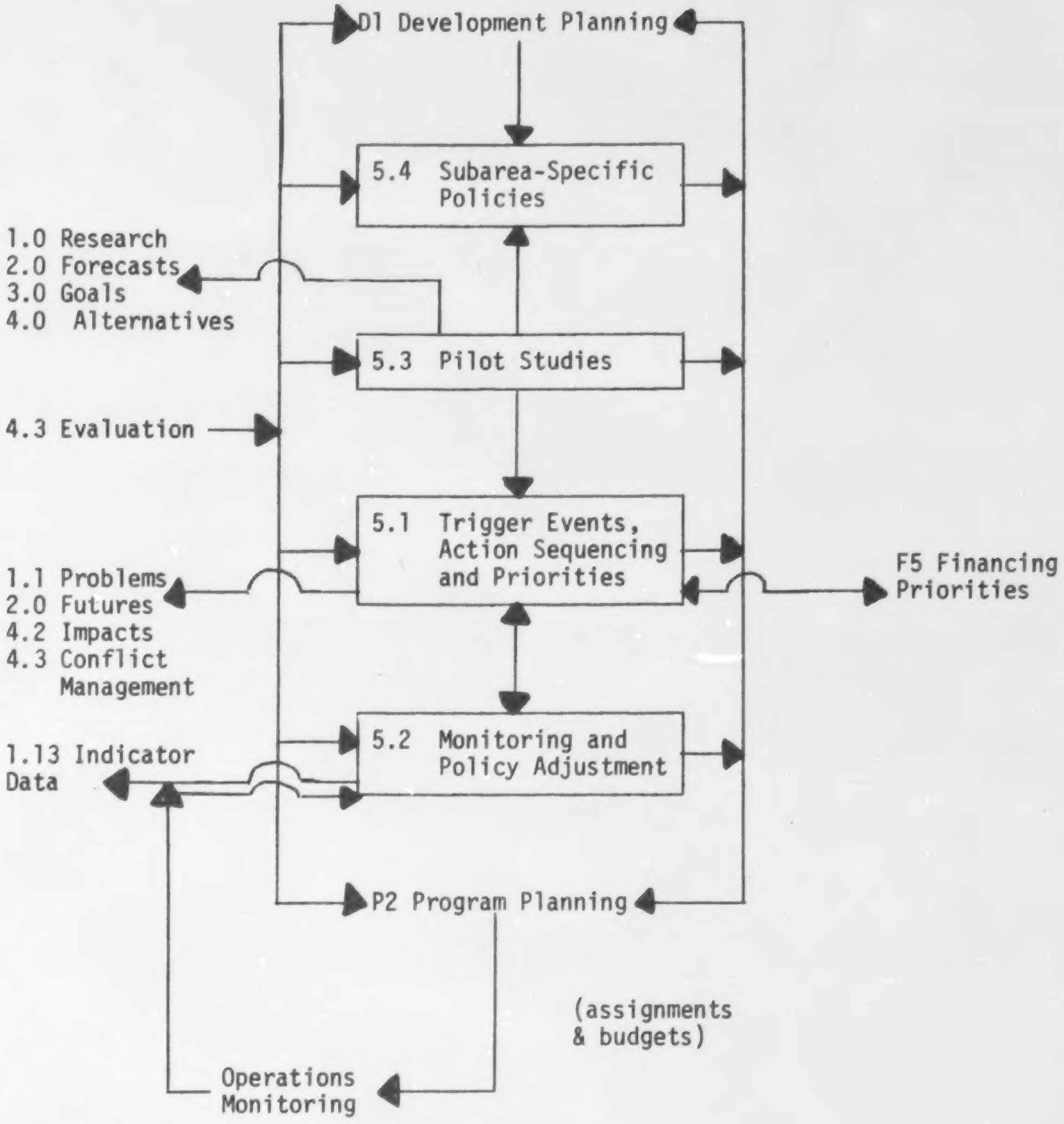
D1 Development Planning
5.4 Subarea-Specific Policies
1.0 Research
2.0 Forecasts
3.0 Goals
4.0 Alternatives
5.3 Pilot Studies
4.3 Evaluation
5.1 Trigger Events, Action Sequencing and Priorities
1.1 Problems
2.0 Futures
4.2 Impacts
4.3 Conflict Management
F5 Financing Priorities
5.2 Monitoring and Policy Adjustment
1.13 Indicator Data
P2 Program Planning
(assignments & budgets)
Operations Monitoring

FIGURE 8-1: Policy Refinement Stage (S5.0)

variety of future possibilities and goal and policy combinations. Work on some of these possibilities and combinations will prove very rewarding. Others will be well beyond the point of diminishing returns. For these choices, criteria of probability, desirability and prepareness must be applied with knowledge and wisdom. The more important points in the SP process for decisions concerning priorities include the following:

S1.1 Which problems get priority attention?
S2.0 For which futures will forecasting be most productive:
S4.2 What policy impacts should get what attention?
S4.3 What weights are to be placed on the several goals/impacts involved in a policy decision?

At these points the Probability-Desirability Matrix, discussed earlier (S2.1), will be a helpful way of displaying alternative futures in a way that will facilitate sound decisions on priorities.

S5.2 MONITORING AND POLICY ADJUSTMENT

The function of this feedback step is to monitor actual events and developments to determine which future or sequence of futures will in fact occur, and to adjust the strategic policies of the organization accordingly. The influencing and performance indicators (S1.12) are closely observed and carefully interpreted by top management. The performance indicators, of course, directly measure the organization's program performance; other indicators will measure forces beyond the organization's control. In either case the indicators are closely watched for trigger events that tell that a threshold of policy change may have been reached.

S5.3 PILOT STUDIES

Pilot studies may serve two functions: (a) Problem Analysis (1.1) based on subarea land use and socio-economic data (1.2) will delineate the unique problem and policy sets of specific areas and cast light on the range of variation of influencing factors; (b) Demonstration Studies can test and refine the selected goal-policy sets prior to general application. Pilot Area Studies serving either or both functions may be undertaken within the local government's jurisdiction. In addition, experience from well-documented studies in comparable situations in other regions may be highly relevant.

5.4 SUBAREA-SPECIFIC POLICIES

The function is to assure that the general strategic policy is adaptable, and is adapted, to the unique needs of the various subareas of the community. Most local government jurisdictions are not homogeneous. They are composed of a number of varied subareas -- central business district, neighborhood convenience stores, and/or regional shopping centers, single-family areas and multi-family areas, developed and redeveloping areas, upper income, lower income, black, white, yellow, minority, majority, ethnic and mixed, stable neighborhoods and transition zones, etc. No two subareas of a jurisdiction are exactly the same. "A uniform policy set, applicable to all areas or zones is highly unlikely to be very meaningful."[1] In addition, such a policy would be very difficult, if not impractical to formulate. Therefore, a concept of strategic policy is needed that provides for the division of a jurisdiction into "policy zones", permitting the development and consideration of subarea-specific policy sets.

Land use zoning, although implementation policy rather than strategic policy, provides an analogue and a precedent for the concept of subarea-specific policies. In zoning, the counts have recognized the need for diversity, as well as uniformity, of policy.

S5.41 Community Involvement Techniques for Subarea Strategies

The "grass roots" level is where impacts may be keenly felt, and where citizen involvement is often most feasible. Techniques for subarea strategy planning, and the chapters wherein they are described, are as follows:

(a) Most Often Used

Advocacy Planning (Chapter 16)*
Technical Assistance (Chapter 16)*
Coordinator/Catalyst (Chapter 15)*
Neighborhood Planning Council (Chapter 16)*
Task Force (Chapter 13)*
Neighborhood Meeting (Chapter 14)*

(b) May Be Used

Fishbowl Planning (Chapter 14)*
Workshop (Chapter 10)*

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*These chapters can be found in Volume II, Technical Supplement.

ENDNOTES

1. Alan Walter Steiss, Public Budgeting and Management (Lexington, Mass.: D. C. Heath and Company, 1972), p. 223.

CHAPTER 9. DESIGNING THE STRATEGIC PLANNING SYSTEM

The strategic planning process evolved for a jurisdiction will reflect its particular situation. Among the more important influences will be (1) its management style and skills, (2) the information generated by other governmental processes, (3) the expectations that persistant social problems (e.g., drug abuse, proverty, housing) be confronted, (4) the financial resources that can be allocated, and (5) the data and skills available.[1]

Design of the community involvement components of strategic planning as part of the overall design of the strategic planning system is a matter of considerable importance, directly related to the purposes of strategic planning. The adaptability of public programs to future contingencies requires a readiness on the part of the citizenry to support or at least accept the changes.

WHY COMMUNITY INVOLVEMENT?

As has been noted earlier, strategic policies must be both technically and politicall feasible. That is: they must both do what they are intended to do, and be publically acceptable. The latter implies a process of informing affected segments of the public and of securing public inputs in policy formulation.[2]

Historically, community involvement in public policy making has its roots in America's rejection of unresponsive English colonial rule. This experience established traditions of limited governmental discretion and formal public accountability and responsiveness. Since the Revolution, community involvement in government has undergone a continual evolution. Until the 1850's the changes centered on universal white male suffrage and the long ballot. From the Civil War to the 1920's the major developments involved suffrage for women and the reform of corrupt local and state governments. (Some political scientists contend that replacement of political machines and "ward healers" by managerial, professional government has worked against the responsiveness of government to large segments of the population).

From the 1930's to the present there have been two divergent trends. One is a great range of new demands on government, resulting in growing administrative bureaucracies. Accompanying this, and also reinforcing the strong trend toward professionalization, is the complexity of the new areas of governmental responsibility - the economy, welfare, the environment, energy, world order and development, and even the "quality of life" -- to name but a few. Development and execution of policies in these complex areas of responsibility has called for a systemic approach greatly expanding inter-governmental, inter-agency, inter-professional involvement.

In tension with these trends toward professionalized bureaucracies has been the movements toward increased suffrage and power for minority groups and toward efforts by citizen groups to control, or at least influence, the bureaucracies. This latter movement has generated increased citizen participation, "Sunshine Laws" and other legislation to increase the responsiveness of officials, and the broadening of participation through litigation.[3]

Litigation places community involvement in an important legal perspective. It serves two functions. First, it is a check on all governmental decision-making processes, including those involving participation. Secondly, litigation often serves as the rallying point for citizen efforts. Although community involvement in public policy formulation does decrease the likelihood that a decision will be challenged in court, it does not eliminate the possibility. Litigation is the final appeal process in the American democratic system.

In this historical perspective it can be seen that "community involvement" in governmental policy and program formulation has come to include both "citizen participation" by private, non-official interests and intergovernmental, inter-agency participation. Also in historical perspective it is clear that the basic purpose of community involvement is to the citizens. Inherent in our democratic traditions is the premise that the decisions of government should reflect the preferences of the people. There are important secondary reasons for involving other governmental or citizen groups: it helps create better plans, it increases the likelihood of implementation, and it generates support for the agency. In the larger perspective, however, its contribution to genuine democracy is the significant function.

Most observers of government agree that there are many questions and issues about the participatory process that have not yet been resolved. Many believe that the next few years will see an internsification of the conflicting trends of the last few decades. In one trend, management of the economy, the environment and other governmental responsibilities will of necessity become far more professionally sophisticated, even harder for the citizen to understand and influence. An opposing, citizen activist trend will be generated because such advanced "systems management" inevitably impacts citizens and interest groups in vital ways, affecting their pocketbooks, their life styles and quality, and their human rights and individual liberties.

The collision between these two trends will generate many issues and conflicts for public officials. A number of observors have suggested alternative futures: one future consists of more effective and workable modes of participation; the other is the ruthless repression of human rights and liberties. Given this choice, one's "desired future state" is likely to be on the side of improved community involvement.

Principles of Community Involvement

If the premise that community involvement is essential in policy formulation then it follows that it must be considered a sub-process in strategic planning. The design and management of the participatory aspects of the strategic planning process, like staff activities aspects, must be given the careful attention that is required. To aid those officials with responsibilities for community involvement, several lessons and principles can be drawn from the federal, state, and local efforts of recent years.

Probably the most basic lesson that can be drawn from the experience of many agencies at all levels of government in recent years is that the fundamental ingredient of success is an open process. That has become almost a cliche in discussions of participation in planning, but it is also the most common root problem generating controversy and confrontation in practice, as well as less dramatic failures of the planning process to meet people's needs.

There is no formula for an open planning process, but its characteristics are easy to identify. Openness means that the purpose and the content of the process, as well as the schedule for doing it, and described as clearly and concretely as possible -- the decisions that have to be made, the information that will be used to make them, the choices which are and are not open for consideration and why, and the time when different steps are necessary or desirable. It means the "ground rules" are clearly laid out, especially about who makes decisions and on what basis. Openness means that planning is done publicly, to the maximum extent possible -- because the decisions that are to be made are public business. It means that any individual or group who feels they have a useful contribution to make to the process has an opportunity to do that. And it means that written information generated during the planning process is made available to interested participants. That kind of openness does not guarantee that there will be trust or agreement between planners and the public, but it does help to insure that what conflict does take place will be over the real issues that have to be resolved, rather than over the question of whether an honest intent to resolve them is the real objective of the process.

It is essential that flexibility be maintained in the structure of the participation process, because the participants themselves should be directly involved in defining that process, including whether or not it should take place. Although that may sound like adding another layer of "process" to an already complex area -- saying we need citizen participation about how to do citizen participation -- it is in reality fairly straightforward and pragmatic.

Early involvement of the public in the planning is also important. If too much time elapses between the beginning of the process and the beginning of public involvement, several problems may develop: the flexibility to respond may be lost. Rumors may have spread misinformation. Local leaders may feel ignored and become distrusting. In short, early involvement often saves time and agony.

SELECTING TECHNIQUES FOR STRATEGIC PLANNING

Figure 9-1 provides in matrix form an easy-to-use guide for selecting strategic planning techniques suitable for each step of the process.

Strategic Planning Technique	Monitoring and Problem Identification	Problem Modeling	Forecasting	Goal and Objective Setting	Strategy Formulation & Testing	Conflict Management	Subarea Strategies	Public Information	Described in Chapter
Advocacy Planning	A+	B	B	B	A+	B	A+	B	16
Attitude Surveys	A+	B		A		S	S		13
Arbitration/Mediation				B		A+			15
Citizens Advisory Committee	B	B	S	B	B	S		S	14
Technical Assistance	A+	A+	B	A	A+	A	A+	B	16
Coordinator/Catalyst	B	B	B	A	A+	A+	A	B	15
Fishbowl Planning	A	B	B	A	A+	A	B	B	14
Hotline	A	B	S	S	S	S+	S	A	17
Community-Sponsored Meeting	A	B	S	S	S	S	S	B	10
Neighborhood Meeting	A	B	S	S	S	S	B	A	14
Open Information Meeting	A	B	S	S	S	S	S	A	17
Neighborhood Planning Council	A+	B	S	A	A	B	A+		16
Policy Delphi	A	B	A+	B	A+	A		B	12
Public Hearing	B				S	S			14
Public Information Program	S	S	S	S	S	S	S	A+	17
Scenario			A+		S		S	S	12
Task Force	B	A+	A+	A+	A	A	A	S	13
Work Shop	A+	B	B	A	B	B	B	B	10

Codes:

A = Primarv Techniaue
B = May be useful
S = Supporting technique

FIGURE 9-1. Technique Selection Matrix

INTERGRATING STRATEGIC PLANNING INTO ORGANIZATIONAL PROCESSES

This concluding chapter addresses questions concerning the implementation of strategic planning in local governments. What needs to be done? Where to start? How can strategic planning be made effective? How can needed data be obtained as low-cost spin-offs of other activities?

The ultimate answers to these questions will vary with the local government and its situation. However, this chapter can provide guideposts to help point officials in the right direction.

The first guidepost is to just "Do It!" Early in this Manual it was observed that strategic planning is, above all, a style of management. It's a style in which the policy-makers and their advisors persist in seeking answers to such questions as "Where do we want to be on this issue?", "What is our goal?", "Is it realistic? - How can it be done?", "What are the options?", "What are the trade offs?" Answers are sought in an orderly way that involves all parties needed to devise and support the final strategy.

There's no way to develop such a management style except to do it. Learn by doing. Get experience. Find out what works. Start--simplistically, perhaps--but start. Accept the limitations of each situation, seize the potentials, and do the best one can. Get a pragmatic feel for strategic planning--develop a style appropriate to the situation.

The second guide is: systematize and integrate strategic planning procedures into other organizational processes. A manager convinced of the need for strategic planning, developing an effective management style, will be seeking ways to (a) effectuate strategic plans and (b) to strengthen strategic planning with resources generated by the organization.

This chapter focuses on opportunities for (a) and (b). The chapter is divided into four sections, as follows:

Overview of Local Governmental Planning Processes
Structure of Governmental Processes
Organizational Resources for Strategic Planning
Effectuating Strategic Plans

Overview of Local Governmental Planning Processes

Those who manage effectively have in their minds blueprints of how the organization functions, or can function, to accomplish its mission. Those who try to teach management put the best of these blueprints down on paper to pass on the wisdom of the profession to others. Textbooks on urban management, such as the International City Managers' Associations' Managing the Modern City, have diagrams to show typical, effective local governmental processes.

To demonstrate the compatibility of strategic planning concepts in this Manual with generally-accepted conceptalizations of governmental processes, Figure 18-1 was developed. The flow diagram in the lower half of the diagram is drawn from John Parker's Chapter "Administrative Planning" in Managing the Modern City, one of the most widely used urban management texts.[1] Only minor additions and changes in terms were made to conform to the terms used herein.

The elements in Parker's "administrative planning process", roughly represented by the boxes in Figure 18-1, sort readily into "long-range, strategic", "intermediate-range" and "short-range" planning, as practiced in corporate strategic planning (Chapter 2). This classification is made in the upper portion of the Figure. Program Planning is shown as the essential activity which links strategic planning to implementation devices such as the annual budget. All in all, strategic planning as advocated in this training module may properly be regarded as a clarification and detailing of the initial phases of the administrative planning process described by Parker.

Structure of Governmental Processes

One way to envision local governmental activities is as a series of cyclical activities. The annual budget cycle is the most obvious example. Others, too, are cyclical. The Comprehensive Development Plan is prepared, adapted, implemented--and replanned as conditions change. Program plans follow a similar cycle. Management and organization improvements are made--only to be followed by further improvements. In operations, tasks are conceived, scheduled, staffed and equipped, supervised and evaluated; this cycle is continuously repeated. The timing of these cycles, is more variable than that of the budget cycle, but the iterative pattern can be found in all organizational processes. The basic components of each of these iterative activities can be summarized as follows:

Strategic Planning

S1 Basic Research
S2 Alternative Futures
S3 Goals and Objectives
S4 Alternative Policy Responses
S5 Policy Refinement

Development (Land Use & Physical) Planning

D1 Basic Analysis, Forecasts and Policies
D2 Land Use and Transportation Planning
D3 Resource Planning (Natural, Economic, Human)
D4 Plans for Facilities and Services
D5 Comprehensive Development Planning

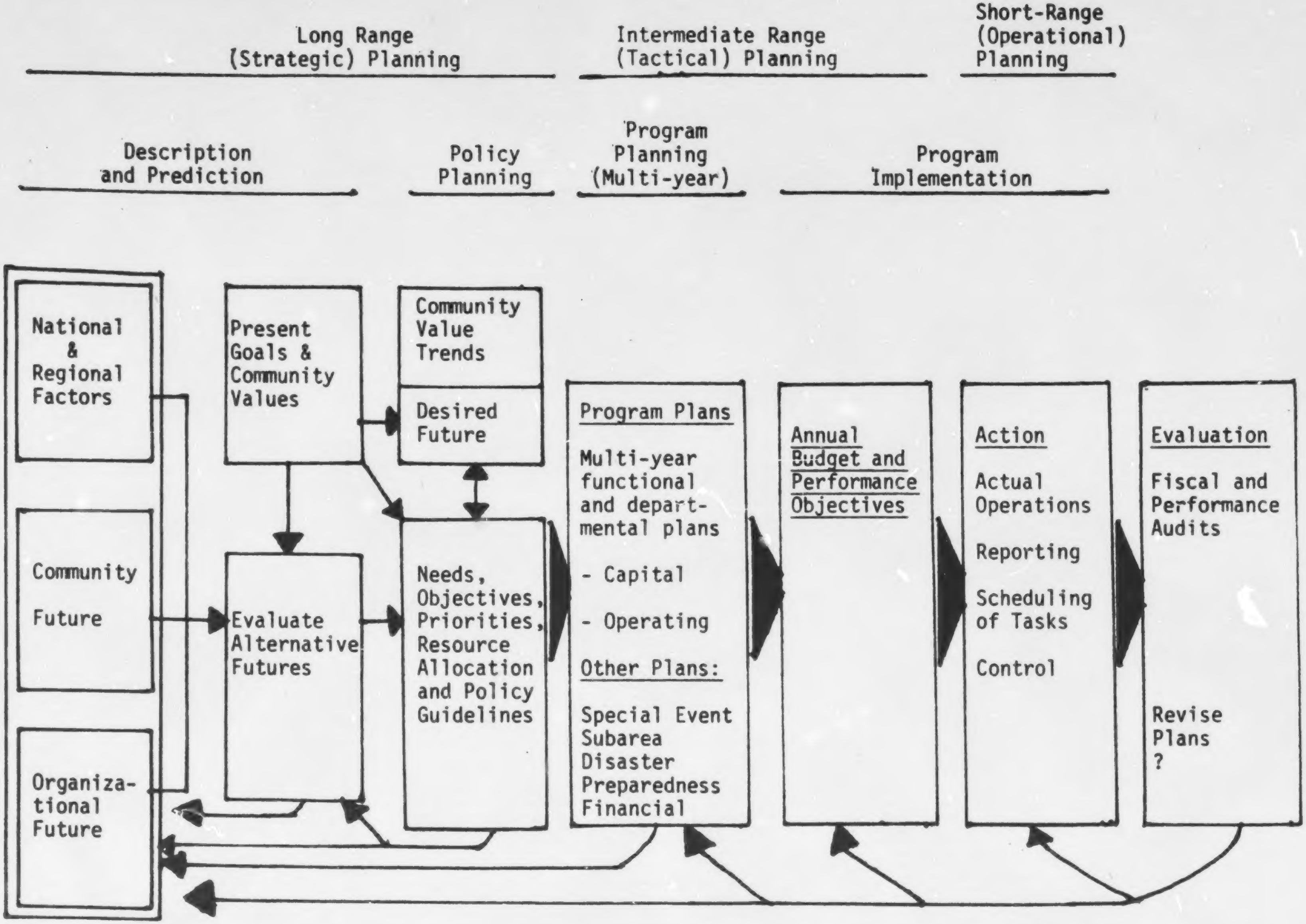
Long Range (Strategic) Planning
Intermediate Range (Tactical) Planning
Short-Range (Operational) Planning
Description and Prediction
Policy Planning
Program Planning (Multi-year)
Program Implementation
National & Regional Factors
Community Future
Organizational Future
Present Goals & Community Values
Evaluate Alternative Futures
Community Value Trends
Desired Future
Needs, Objectives, Priorities, Resource Allocation and Policy Guidelines
Program Plans
Multi-year functional and departmental plans
- Capital
- Operating
Other Plans:
Special Event
Subarea
Disaster Preparedness
Financial
Annual Budget and Performance Objectives
Action
Actual Operations
Reporting
Scheduling of Tasks
Control
Evaluation
Fiscal and Performance Audits
Revise Plans ?

FIGURE 18-1.--STRATEGIC PLANNING IN THE ADMINISTRATIVE PLANNING PROCESSES OF LOCAL GOVERNMENT

Source: Adapted from John Parker, "Administrative Planning," Chapter 10 in (ed.), Managing the Modern City (Washington, D.C.: International City Managers Assoc., 1970), Figures 10-1 and 10-2 and text.

Program Planning

P1 Program Needs and Structure
P2 Program Alternatives
P3 Program Analysis
P4 Service Standards and Loads
P5 Assignments and Implementation

Financial Planning and Capital Improvement Programming

F1 Long-Range Financial Plans
F2 Financial Analysis
F3 Alternative Fiscal Policies
F4 Financial Requirements and Sources
F5 Assignment of Priorities
F6 Operating and Capital Budget; Capital Improvement Program

Management Improvement and Organizational Development

M1 Identification of Needed Improvements
M2 Budgeting and Accounting Improvements
M3 Other Methods, Equipment and Technology
M4 Organizational Structure
M5 Training
M6 Regulations and Procedures

Operations

O1 Program Scheduling and Network Analysis
O2 Staffing and Purchasing
O3 Quality Analysis and Control
O4 Coordination and Management
O5 Performance Monitoring

These cyclical local governmental processes interact with each other at many points--so many points that it is difficult to represent them in two dimensions. An attempt has been made to diagram some of these interactions in Figure 18-2.[2] It's not necessary to trace out all of the arrows (unless one is a masochist) to appreciate the main point that organizational processes do, and must, mesh at many points. The role of strategic planning as shown in Figure 18-2 has three striking features. The first is the number of important interactions with other local government processes. The second is the large amount of the information necessary for strategic planning which can be obtained from the better established processes. The third is the number of important, supportive information inputs from strategic planning to the other processes. These three features are detailed in the two sections which follow.

Organization Resources For Strategic Planning

Figure 18-2 identifies eleven points where typical local government activities may generate information of value to strategic planning.

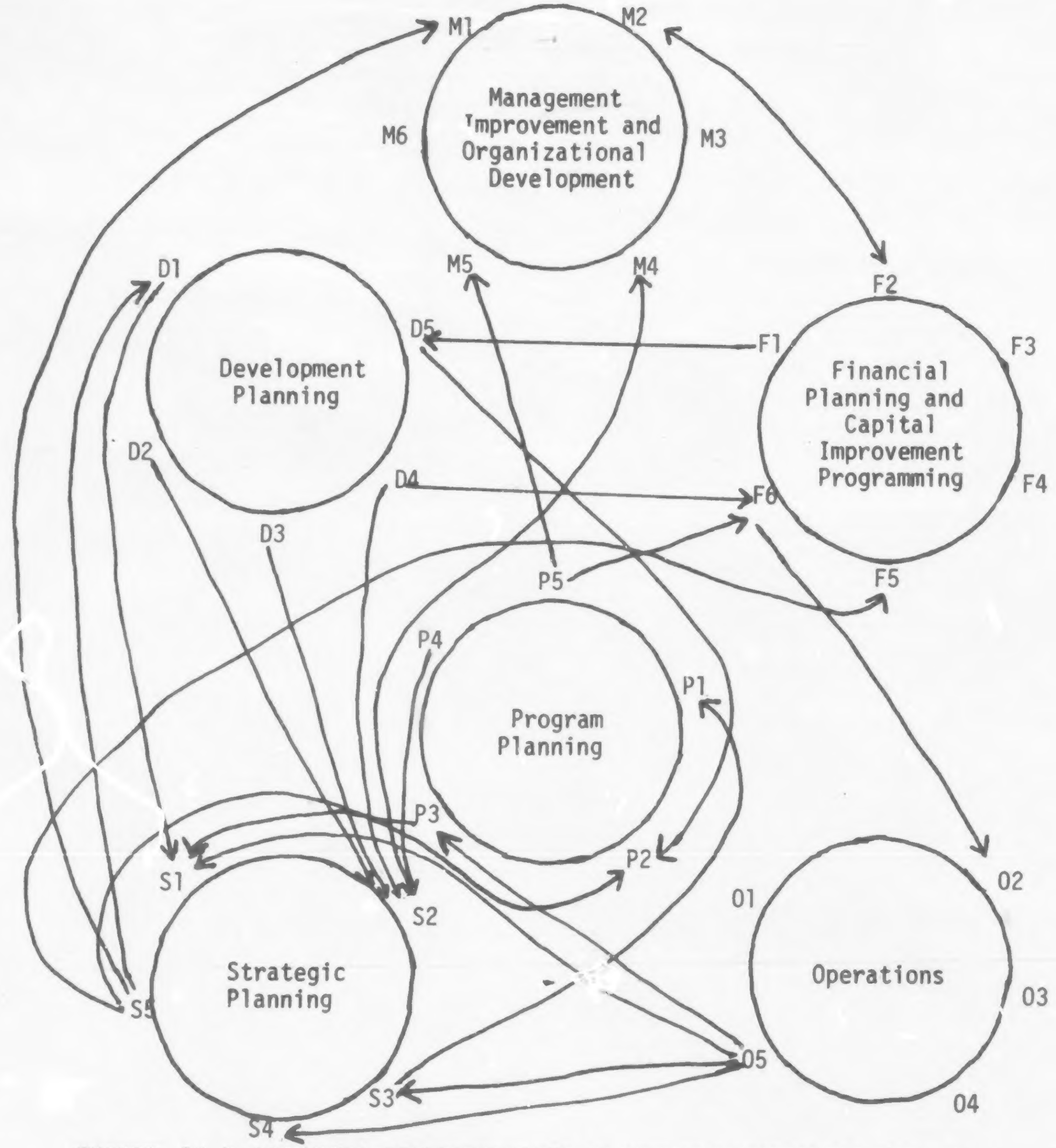
M1
M2
Management Improvement and Organizational Development
M6
M3
M5
M4
D1
Development Planning
D5
D2
D4
D3
F1
F2
F3
Financial Planning and Capital Improvement Programming
F4
F6
F5
P5
P4
P1
Program Planning
P3
P2
S1
S2
O1
O2
Strategic Planning
Operations
S5
O3
O5
S3
O4
S4

FIGURE 18-2: SCHEMATIC REPRESENTATION OF INTERRELATIONSHIPS BETWEEN LOCAL GOVERNMENTAL PROCESSES.

These eleven inputs to strategic planning activities are:

Source Activity	Using Activity	Significance
D1	S1.2	Land use data, analyses and forecasts
D2	S2.2	Land use plans
D3,4	S2.3	Community facilities, services and resource plans
P3	S1.1	Program analyses
P4	S2.3	Service standards and loads
F5	S5.1	Priorities
M4	S2.4	Organizational structure and improvements
F5	S5.1	Priorities
O5	S1.1	Current data from monitoring to problem analyses
O5	S3.1	Current data from monitoring to appraise goals context
O5	S4.2	Current data from monitoring for impact assessment

A city or county manager, familiar with his own organization's data resources, might come up with many more. The point is that the manager with a strategic style need not indulge an expensive taste, but can fare very well off of a regular harvest of data.

EFFECTUATING STRATEGIC PLANS

The outputs from strategic planning can be fed into the other five processes at a number of points to secure implementation of strategic plans. Figure 18-2 identifies six of these points, as follows:

Source Activity	Using Activity	
S4.5	D1	Strategic policies for physical development
S4.5	P2	Strategic policies for program planning
S3.3	P1	Organizational Goals Structure as a basis for Program Structure
S5.1	F5	Priorities
S4.5	M1	Identification of management improvement and organizational development needs
S2.4	M4	Organizational improvements needed

As strategic planning grows in acceptance as a local government activity, managers will certainly add to this list of "levers and buttons" to pull and push to guide their organizations, and community's, future.

Endnotes For Community Involvement

1. A provocative, insightful monograph dealing with the design of strategic planning is Perry E. Rosove, "Planning for Planning in State and County Public Agencies" (Los Angelos, Calif.: Center for Future Research, Graduate School of Business Administration, UCLA, Monograph M 18, December 1974).

2. This and the community involvement techniques in subsequent chapters draw heavily from the author's previous experience and writing, e.g., Douglas C. Smith, Robert C. Stuart and Robert Hansen, Manual for Community Involvement in Highway Planning and Design, Washington, D. C.: Federal Highway Administration, 1975 (NTIS). Another source used extensively, and gratefully acknowledged, is Arthur D. Little, Inc., Effective Citizen Participation in Transportation Planning, Washington, D. C.: U. S. Department of Transportation, Federal Highway Administration, 1956.

3. Nelson Rosenbaum, "Citizen Involvement in Land Use Governance," (Draft Report, Washington, D. C.: Urban Institute, 1976).

Endnotes For Implementing Strategic Planning

1. John Parker, "Administrative Planning," Chapter 10 in William Goodman (ed.), Managing the Modern City (Washington, D. C.: International City Managers Association, 1970), Figures 10-1 and 10-2 and text.

2. Inspired by Alan W. Steiss, Public Budgeting and Management (Lexington, Mass.: D. C. Heath and Company, 1972), pp. 180-183.

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TECHNIQUES FOR STRATEGIC PLANNING

Prepared by Robert C. Stuart

TECHNICAL SUPPLEMENT
to
Module Number One
of
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Package VI

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CHAPTER 10. MONITORING AND PROBLEM IDENTIFICATION

"The heart of monitoring and problem identification activities is having an ear to the ground--mixing the metaphor to make the point," a populist mayor might say. Actually there is much more to problem identification. There has to be a network within the organization that sorts the strategic "problem messages" from the rest and puts them onto an agenda for consideration.

As suggested by Figure 9-1, the Technique Selection Matrix, there are almost an unlimited number of possible ways to monitor and identify problems. In this chapter two diverse techniques are examined. One, Community Sponsored Meetings, takes advantage of citizen initiatives. The other, Workshops, is usually an organizationally-initiated means of securing individual insights and reactions through a structured process.

COMMUNITY SPONSORED MEETINGS

Description and Function

Community-Sponsored Meetings are organized and chaired by a citizen group, organization or association, focusing on a general planning program or a specific project. While such meetings frequently take the form of an open meeting, they may also be in the form of a debate, a forum, or a seminar. Characteristically, such meetings are sponsored by neighborhood groups, environmental and other interest groups, local business organizations, League of Women Voters, or civic associations. Their purpose is generally to provide one or more parties-at-interest with citizen perspectives on the planning process and/or issues of concern. The format of the meeting and the role of the agency representatives are set by the sponsoring group. The agency representatives may be asked to be responders, or to provide technical assistance to the group in planning the meeting, or, in some cases, when the citizens group's purpose is to enlighten the planners, agency staff is asked to be present as the audience or as reactors-discussants. These meetings may be as technically and organizationally well-prepared as those conducted by the official planning agency, particularly when the sponsoring group is sophisticated on the issue.

The Community-Sponsored Meeting is one of the most commonly used techniques in response to any public program or issue, whether or not the program is characterized by an extensive participatory process. (See also Meetings--Neighborhood, and Meetings--Open Information.)

Positive Features

Since these meetings are sponsored and chaired by the citizen group, the dialogue takes place in lay terms, and the citizens feel free to express their views. In such a climate, issues on which people feel strongly may surface and can provide the agency with significant insights into how people in one or more organizations view the agency, the program, or the project at issue. Such information should be useful to the agency in a general sense, but, more particularly, in framing appropriate responses, in identifying alternative solutions that might well not have been noted by the planners, or in anticipating technical and political problems at an early stage in the planning process. When the format allows, the meetings also provide an opportunity for the agency to present its point-of-view. Well-organized, constructive meetings can provide a mechanism for informing the public and for creating credibility for the critical actors and the planning process.

Negative Features

Meetings of this kind, if particularly hostile or uncommunicative, can cause long-term disruption in the relations between the citizen group and the planning agency, unless care is taken to follow up on concerns raised and insure continued communication. If the agency planner is not well-prepared in the technical aspects of the program or is unprepared for possible hostile reactions and becomes defensive or uncommunicative, the process is endangered and the credibility of the agency is at risk. Some community-sponsored meetings may be designed deliberately to embarrass the agency, to undercut the planning process, or to exacerbate the legitimate citizens' concerns with rhetoric.

Potential for Resolving Issues

Depending on the purpose of the meeting, it can exacerbate conflict and controversy, or it can bring about a change in perspectives and potentially a redefinition of goals and alternative approaches.

Program Utilization

Community-led meetings, as generally defined, are used in relation to virtually all public programs. The specific category of community-led seminars has been a feature of Model Cities programs, urban renewal, OEO programs, and other types of public and private neighborhood programs.

Costs Involved

Expenses for a community-led seminar are borne by the sponsoring organization, and can represent a financial hardship if the organization has limited resources. Agency costs are relatively minor, and include the staff invited to participate and any visual aids or printed material the agency may wish to utilize.

WORKSHOPS

Description and Function

Workshops are product-oriented working sessions. They provide a structure which enables the parties-at-interest to engage in mutual education by thoroughly discussing a technical issue or idea and by trying to reach some basic understanding about its nature, relevance, or role in the particular study or project. Workshops in the strategic planning and implementation process are most normally suitable to provide for citizen participation around a specific issue which has a specific focus and a specific set of potentially interested parties. Workshops can be a useful adjunct and supplement to public information meetings to follow up on specific issues raised but not resolved at these larger meetings.

Effective Workshops generally focus on a specific topic, and data are presented in language readily grasped by laymen. They usually involve a limited number of direct participants--from 12 to 25 is usually a manageable number, although workshops of from 40 to 100 people can be operated successfully, if the group is subdivided into small work groups.

Workshops can be open to all or by invitation only, but they usually work best when limited to the active parties-at-interest who are at the same general level of knowledge or understanding of the particular issue at hand. While there is usually a Workshop chairman or discussion leader, the meeting is characterized by less agency presentation and more mutual discussion than larger open meetings can permit. Workshops usually result in the production of a written document, describing the issues and positions developed at the Workshop, the suggestions made, and the consensus, if any, reached by the participants. In a long planning process, it is advisable to plan for a series of Workshops that coincide with important milestones of the process--e.g., alternative futures, goal development, alternative options, impact analysis, etc.

Positive Features

Workshops offer one of the best ways for introducing alternative points of view and values to the study process at the technical and analytical level. They can provide the means through which both outside parties and agency staff can exchange ideas on the specifics, can identify and debate issues of mutual interest, can examine negative and positive effects on various parties-at-interest, and can try to persuade one another about solutions. By encouraging serious levels of interaction among participants, they make it difficult for aggressive people to dominate the session. Workshops initiated by the management or technical staff of an agency and integrated into the work program being undertaken can provide an excellent mechanism for testing alternatives, receiving feedback, and making more relevant the technical work, based on a quality input from outside parties-at-interest. Well-run Workshops can improve both the knowledge and the value-based perceptions of all the participants.

Negative Features

Workshops, to be effective, usually require some selectivity in the designation of active participants. As a result, Workshops may appear to be more exclusive and "closed" than other types of meetings. In a planning situation where there are large numbers of different and conflicting interests, extensive reliance on Workshops without other, more open, public meetings and participatory devices being operated simultaneously may tend to alienate uninvited participants. When it is not possible to include all potential interests, consideration should be given to operating Workshops with observers invited and allowed to comment at an appropriate time. Care should be taken that the technical staff and/or other single parties-at-interest are not using the Workshop for manipulative or cooptive purposes.

Potential for Resolving Issues

Workshops have very good potential for resolving issues at the technical and analytical levels, if they are well-organized, well-run, and healthy interaction is stimulated.

Program Utilization

Workshops have been used in many federally funded public programs, e.g., HUD large-scale rehab, EIS statement preparation, water resources, transportation, etc.

Procedures

Step (1) Determine the objectives or tasks that should be achieved. Usually workshops are designed to determine certain community needs and how those needs might best be met. For example, the workshop might be concerned with determining how community life might be disrupted by an adverse trend or a proposed project and how this disruption might be lessened so that community activities would be least disturbed.

Step (2) From the objectives sought, determine the level of community involvement that is needed to achieve that objective(s). Determine whether workshops should be open to the public or whether the workshop number should be limited by inviting select community members. Determine whether or not the workshop will require community members with special skills (e.g., people with knowledge in environment, business, design skills, etc.). Determine at the outset whether a group dynamics specialist will be needed to conduct the initial stages of the workshop (they are especially helpful when the community is meeting for the first time).

Step (3) From the decisions made in step (2), determine the appropriate place for a workshop to be held. Generally, as a rule, workshops should be located away from agency offices, at a location that is easily accessible to all workshop members and in a place which has several rooms so that the workshop can break into smaller groups.

Step (4) Conduct the workshop meetings. If the meeting is the first time people have assembled, then necessary background information (introduction, meeting procedures, objectives, expected product, etc.) should be provided.

- (a) Introductions are important. A skillful discussion leader can allow everyone to introduce themselves without the process becoming boring. Ask questions of individuals' backgrounds. Be prepared to recognize some members of the group. It is vital that each person knows he/she is important in the operation of that workshop.
- (b) A workshop chairperson should be selected by the first or second workshop session. A chairperson should be a well respected community member who is capable of conducting group activities and who can take responsibility for meeting deadlines.
- (c) Keep meetings short (4-8 hrs.) to maintain maximum interest.
- (d) The meeting should not be dominated by highway agency persons after the introduction period. The community members should take command once they are capable of doing so.

Step (5) Gather papers developed by the workshop and analyze. These papers should outline identified problems and needs and should present recommendations to the agency.

Step (6) Determine by the meeting's end whether more workshops will be needed. Evaluate the meeting's success or weaknesses and suggest ways in which future meetings might be improved.

Costs Involved

Most preparation and design costs, other than logistics, could be absorbed within technical budgets--approximately $500-$2,000, including staff preparation and mailings. Cost of staff time--4 to 6 person-hours per Workshop, depends on number of staff participants. It is sometimes useful to bring in outside advisors skilled in Workshop design to help technical staff and others become sensitized to group dynamics and interaction; consultants' charges range from $100-$1,000 per day.

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CHAPTER 11. PROBLEM MODELING

A model is a simplified representation of the real world. The miniature models we are familiar with -- toy trains and autos and the topographic models and maps -- fit this definition. They have to be simplied because on small scales, there is no way they can contain all of the richness of detail the real world has.

The models the analyst of urban social, economic and socio-economic problems uses most often are symbolic models. Most often these are graphic models -- block diagrams, arrow diagrams, and the like. Sometimes he goes further to develop the more elegant, estoeric mathematical models. If he can take additional steps to computerize his model, he may have developed a tool of great value in public policy-making.

But the analytic and communicative power of graphic models should not be overlooked. An algorithm for analyzing urban problems can be suggested, as follows (key terms and concepts are set in parenthesis):

(1) What is the problem?

    (A) What is the goal? (Desired state or position) (Answers to (1) and (1A) will identify the system).

    (B) How can the seriousness of the problem, and progress toward the goal be measured? (Criteria, system performance indicators).

(2) What public policies can aid in achieving the goal? (Influencing controllable or indirectly controllable factors).

    (A) How can the effectiveness of each policy be measured? (Organizational performance indicators).

(3) What uncontrollable factors affect either the system or organizational performance? (Influencing, uncontrollable factors).

    (A) How can these influencing factors be measured? (Leading indicators).

(4) What is the relationship between each influencing factor and organizational and system performance? (Hypothesis).

(5) How can data be obtained to test or apply the hypothesis? (Calibration).

All of these terms and concepts are defined and illustrated in Chapter 4, pages 23-28. To illustrate the algorithm, imagine a neighborhood that was concerned with their quality of life. At their request, the City Housing Planner meets with them and helps them to organize a Workshop (See description in Chapter 10). The Workshop decides that they like their neighborhood pretty much like it is and agree on the following:

Goal: A stable neighborhood.

Problem: How to overcome certain deficiencies?

When asked how to measure a stable neighborhood, the Workshop came up with:

	System Performance Indicators
1. Maintain a high level of satisfaction with neighborhood.	Attitude survey.
2. Keep neighborhood and housing housing appearance and condition good.	Annual penalty point survey by a committee.
3. Maintain a high level of home ownership.	Percent of all homes which are owner-occupied, based on annual R. L. Polk City Director Canvass.

Asked successively: "What City actions would help achieve your system subgoals?", "What other, uncontrollable, factors will influence your goals?" and "What is the hypothetical relationship between these factors and the system subgoals?", the Workshop developed the arrow diagram shown in Figure 11-1.

The arrows represent those hypothetical relationships between variables that are strong influences. Absence of an arrow indicates a relationship that was considered weak or non-existent. The pluses (+) or minuses (-) indicate direct or inverse correlation. For example, neighborhood appearance was hypothesized to vary inversely with age of housing.

The Workshops product was a system analysis, i.e. a definition of the nature of the components and their inter-relationships. Since the components themselves are systems (subsystems), Figure 10-1 depicts a system hierarchy.

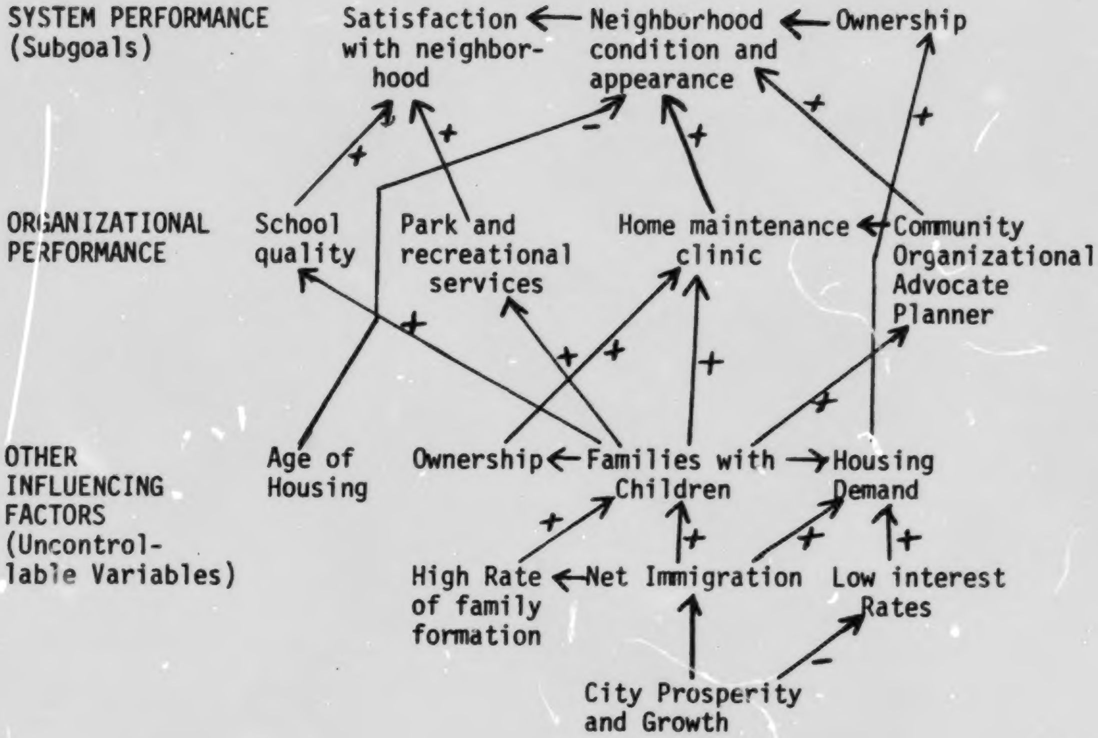
SYSTEM PERFORMANCE (Subgoals)
Satisfaction with neighborhood
Neighborhood condition and appearance
Ownership
ORGANIZATIONAL PERFORMANCE
School quality
Park and recreational services
Home maintenance clinic
Community Organizational Advocate Planner
OTHER INFLUENCING FACTORS (Uncontrollable Variables)
Age of Housing
Ownership
Families with Children
Housing Demand
High Rate of family formation
Net Immigration
Low interest Rates
City Prosperity and Growth
+
+
−
+
+
+
+
+
+
+
+
+
+
+
+
+
−

FIGURE 11-1. Example of Problem Analysis Using Arrow Diagram.

ENDNOTES

1. In cities where it prepares city directories, the R. L. Polk Company can provide Profiles of Change data by census tracts at a nominal cost.

CHAPTER 12. FORECASTING

Delphi was originated as a forecasting technique by the RAND Corporation and has been widely used in industry and business. In the latter field, it has been hailed as the most satisfactory forecasting device for use when trends are discontinuous.

The Scenario has a double personality. As a forecasting device it can be like non-quantitative modeling, using reason and logic to extrapolate into the future. As a communication device it sets up a model of the future for layman and expert alike to think about and react to.

POLICY DELPHI

Description and Function

As a method for systematically developing and expressing the views of a panel of individuals, the Delphi Technique has been in use for two decades. Developed by a research group at the RAND Corporation, it was originally used as a means of technological forecasting. In the past few years, however, the Delphi Technique has been extended to handle questions in the area of social planning. One result of these extensions has been termed the Policy Delphi. This is the form of Delphi most applicable to strategic planning and implementation.

A Policy Delphi basically involves a series of questioning rounds with a respondent panel composed of individuals representing various interest groups in a community and many times also including the experts who are associated with the major issues at hand. Policy Delphi has yet to be used in a major planning study. As an example, however, take the major policy issue of whether an outer-belt highway is to be built around a medium-sized metropolitan area. Some of the interest groups involved could include: central city groups and others who are opposed to the beltway in principle; those who favor one alternative route over another; ecology-minded groups who oppose highways because of destruction of natural surroundings; local residents; etc. The "experts" to be represented might include: highway planners, city planners, mass-transit directors, civil engineers, or any other individuals involved in the planning team. During the rounds, structured questionnaires are mailed to these panel members requesting them to respond to the issues, by listing their pro and con positions for each option being considered. Results of the panel member responses are described in terms of numbers of respondents who hold each position, and are then returned to the panel members along with a new questionnaire especially developed for the next round. After several such cycles of judgement and feedback, there is usually some convergence toward a common set of goals, objectives and values, brought about by the members re-thinking each issue several times and being exposed to new information input by the other panel members. This process many times develops into a consensus, or in some instances, reveals the difficulties to be encountered in achieving it.

Although no hard and fast rules exist to guide the design of a particular Policy Delphi, it can be agreed that a Delphi involves at least two separate groups of individuals and at least four roles for these groups:

- User Body

The individual or individuals expecting some sort of product from the exercise which is useful to their purpose (e.g., highway planners).

- Design and Monitor Team

The group which designs the initial questionnaire, summarizes the returns and re-designs the following questionnaires (usually professionally-trained experts in Delphi technique.)

- Respondent Group

The group chosen to respond to the questionnaires. The User Body (planners) is many times a subset of the respondent group.

A typical Policy Delphi could be conducted in the following manner, assuming the issue under consideration is a highway slated for construction in a particular community, and the planners have proposed two alternative routes for this highway. The User Body, the planners, would meet with the professional Delphi Design and Monitor Team to discuss the components of the issue at hand, and to define objectives of the Delphi exercise, (e.g., to learn the community response, preferences and objections for each of the alternate routes; to determine what types of opposition might be encountered in implementing either plan, etc.). Once the objectives are clearly defined for both the User Body and the Design and Monitor Team, the Design Team must decide who the members of the Respondent Group should be, secure the cooperation of the respondents (this process is discussed in more detail later), and design the first round questionnaire.

The first round questionnaire is mailed to the selected respondent panel members, requesting them to respond to each alternative under consideration by listing their pro and con positions, and the justification for holding these positions. Once respondents mail the questionnaires back, the Design and Monitor Team analyzes the responses. Each position statement is noted and tallied as to how often that particular argument is listed by the respondent members and the second round questionnaire is prepared.

The second questionnaire begins by giving the panel members feedback from the first round: presenting the position statements listed and the frequency with which each was presented. Thus, each respondent is now made aware of the opinions, viewpoints and new information input by other members of the panel, as well as being given the opportunity to compare how his positions resemble (or differ from) the others. For each of these positions, or information statements listed, the panel members are requested to respond by indicating their degree of confidence, agreement, acceptance, etc., on a rating scale (to be discussed in more detail later). This "worksheet" method insures that each panel member has at least thought through the many varying viewpoints, formed some kind of a judgment about them, and now has a broader base of information upon which to base subsequent opinions.

The remainder of the second questionnaire resembles the first, in that it again presents the issue at hand, and asks that the respondents express their pro and con attitudes toward each of the available options, and in addition requests them to explain the reasons underlying any shift or change their attitudes may have undergone since the first round.

This requestionning procedure can continue for as many as four or five rounds or terminate anywhere after the second, depending on how much more information the Design Team and User Group feel they would like to obtain.

Over the past few years, the Futures Group, of Glastonbury, Connecticut, has developed a modified approach to Delphi, one that simply involves substituting sequenced personal interviews for the written questionnaires.

These interviews are not just questions and answers. Members of the interview team usually begin by issuing the respondent a "deck of cards," each stating a social trend, variable, or feature related to the study at hand. This would correspond to a questionnaire item. Rather than asking the respondent to answer by checking one of five columns (as is the case with questionnaires), he is asked to sort the cards in five stacks. These stacks are labelled according to the subject matter and the type of response solicited. For example, various social trends might be sorted into stacks according to their importance in the future ("very important," "important," "slight importance," "not important"), or their likelihood (using various probabilities), or their trend direction ("increase greatly," "increase," "remain the same," "decrease," "decrease greatly,"), and so on. The option of no vote ("no opinion") on an issue is included so as to eliminate questions which the respondent does not feel qualified to answer or declines to comment on for other reasons. As the respondent is making these decisions, he is encouraged to outline his assumptions and make other commentary on the subject at hand. At the completion of this card sorting, each respondent is asked to add to the list any items he feels should be included. These items are recorded on blank cards and sorted by the panelist. (In the second round, the other respondents will have the opportunity to assess these newly added statements.)

The information generated by all of the respondents is collated and fed back to them in a second round of interviews. For each area about which disagreement exists, respondents are presented with ranges of opinion and reasons for diverse views from Round 1 and allowed to re-evaluate their vote and perhaps vote again.

It should be emphasized that an important feature of most of these Delphi interviews is that they examine the same issues from both an exploratory and normative point of view. That is, the participants are asked not only to estimate what the future is likely to hold (in a "surprise-free" sense). but also to indicate what it could or should be like, and how specific governmental and institutional policies would help to bring it about.

Procedure

1. Focus

The goal of the Delphi technique in this function is not so much to obtain a consensus as it is to establish all the differing positions advocated and the underlying assumptions leading up to the formation of those attitudinal positions. In many cases, first judgments are based on distorted perceptions of the effects a certain decision might produce. With the input from the other panel members, often new information is provided that proves these perceptions to be false or unreasonable. Because the Delphi exercise gives each respondent the opportunity to alter his decisions with each round, it produces as an end result more thoroughly "considered" statements of opinion.

A Policy Delphi should be able to serve any one or any combination of the following objectives:

- To insure that all possible options have been put on the table for consideration.
- To estimate the impact and consequences of any particular option.
- To examine and estimate the acceptability of any particular option.

Once a Policy Delphi has been accomplished, a small working committee can utilize the results to formulate the required decisions.

2. Scope

A Policy Delphi can be given to anywhere from 15 to 50 people as a precursor to committee activity. It allows for the utilization of larger numbers of people than can effectively be employed in a single focused group discussion, or by the committee approach. For many issues, a larger number of respondents, in the area of 20 or more, is commensurate with the number of differing interests that must often be considered in the increasingly complex issues facing highway planning.

It is preferable that respondent groups be composed of individuals with a fairly high level of responsibility, within their interest groups in the community, to assure that they will give careful and considered response to each Delphi questionnaire. These types of individuals will not be willing to spend their time educating the Design group on the major issues. They must gain the feeling that the Designers and Monitors of the exercise understand the subject well enough to recognize the implications of their abbreviated comments. They are not likely to write essays and are not likely to comment at all if they feel they will not be understood. The Design Team must insure that all the obvious questions and sub-issues have been included in the initial questionnaire. Because of this requirement, the advance preparation of the Design and Monitor Team is crucial to the success of this technique.

One method of recruiting these respondents (used quite frequently in focused group discussion research) is to locate various vocal groups in the community (Chamber of Commerce, League of Women Voters, Environmental Protection advocates, etc.) who have been active in protest or support of the issues to be discussed at present or in the past, and then to recruit leaders of these organizations. It takes considerable time and testing among all parties to determine who are considered the leaders in various groups. One process is to ask for names from as many sources in each community as possible: clergy, public officials, local service program personnel, etc., and selecting those mentioned by as diverse a group as possible. One danger of this approach, however, is the possibility of not locating or including members of the "silent majority," and thus losing the information, attitudes or preferences that their input could supply.

Another approach that could be used when the planning is in its very early stages, and no route alternatives have yet been defined, is to recruit members from each of the neighborhoods in the community, or perhaps business owners and homeowners from each neighborhood in order to assess their feelings about the need for a highway, their attitudes toward highways in general, their preferences for the location of a new route, etc. With this information, the planners can then begin to map out possible route alternatives to be considered, which might have the least perceived negative impacts.

Other possible respondent group members could be the business and industrial community for purposes of determining their needs for transportation routes for out-going or in-coming products or raw materials. Commuters, shoppers, public transportation employees (bus drivers, taxi drivers, etc.) can also provide important insight into the needs for new routes, difficulties and problems with existing routes, or peak traffic congestion areas.

The important consideration in respondent selection is to take caution not to over- or under-represent any important segments of the population to be sampled. This will reduce the charge of conducting the Delphi with respondents holding virtually the same viewpoints, which would give planners a biased impression of how the community as a whole would react.

The composition of the respondent group itself is also very important. In principle, respondents should represent diverse positions on specific policy issues. The use of a heterogeneous group is the best way to stimulate a systematic exploration of all the pros and cons on specific resolutions. This has the added benefit of possibly eliminating a potential one-sided outcome. However, if some common foundations of agreement can be exposed among such a diverse group, then the Delphi could prove twice as useful.

3. Limitations of Data

Policy Delphi exercises yield data collected from a particular type of mail survey of a specially selected group of respondents, a non-representative sample of the population being studied, and therefore cannot be expected to speak for the community as a whole. The crux of the matter is that there is really no generally acceptable means of gauging the validity or accuracy of the output of any such procedure. The internal consistency of items can be checked, but the output is still, at best, an opinion, and must be treated as such.

4. Approach

Success of the Delphi exercise (i.e., utility of the results) is totally dependent upon the close cooperation between the Design Team and the intended User Body, or at least a clear understanding by the Design Team of the goals and requirements of the exercise.

In general, well-designed Delphi makes very efficient use of the time expended by the respondent group. In practice, however, a well-designed Delphi does require a significant effort on the part of the Design and Monitor Team and typically requires the use of experts in formulating the issues to be presented to the respondents. The total effort involved is probably as great or greater than (in terms of energy expended), most other mechanisms (e.g., committee, focused groups or interview studies, etc.) designed to obtain the same results.

Development of Rating Scales.--A Policy Delphi deals largely with statements, arguments, comments and discussions. To establish some means of evaluating the expressions of the respondent groups, rating scales must be established for these items such as the relative importance, desirability, confidence and feasibility of various political and issues. Furthermore, these scales must be carefully determined so that there is some reasonable degree of assurance that the individual respondents make compatible distinctions between concepts such as "very important" and "important."

The respondents are frequently asked to rate statements both for the importance they feel the issue has, and for the confidence they have in the validity of that argument. For example, a respondent might feel a particular statement is very important because a significant group of people have high confidence in it; but he, himself, may have low confidence in the validity of that statement. The same concept applies to specific proposals which respondents may feel to be highly desirable but impractical. For these four scales (relative importance, desirability, confidence and feasibility), no neutral answer is allowed. The respondent has to feel the item is either a "little important" or a "little unimportant." In the judgment of many design teams, a neutral answer is equivalent to no judgment and is considered as such. This design choice illustrates the emphasis on developing the pros and cons as opposed to emphasizing a possible consensus. Pros and cons or discussion points entered by a respondent are sometimes evaluated by the Design Team only for the degree of confidence the group has in the statement. It is felt that the importance of the statement will show up, through a shift in the number of respondents voting on the particular issue toward which the statement was directed.

The development of the scales is just one of the major responsibilities of the Delphi Team. The importance of the expertise of this team cannot be over-emphasized. The Delphi questionnaires differs from the typical questionnaire in that it does not have to appear to be easy to complete. In fact, the respondent should be made aware that he will have to think through his answers in order to remain consistent in answering the different parts of the questionnaires.

Materials for the Respondents.--The Design Team prepares a package for each respondent, which contains the following materials:

(1) A set of briefing charts on the Delphi technique, itemizing the procedure to be followed.

(2) A sample question illustrating the response, summary and re-design through three hypothetical Delphi rounds. The sample can be in a different subject area.

(3) A factual summary of the current and past programs affecting the areas to be considered.

(4) A general information and instruction summary for the respondents with definitions of the evaluation rating scales to be used.

(5) Two copies of the questionnaire so the respondent may retain a copy of his answers.

This complete package is usually prepared only for the initial round of the Delphi exercise; however, two copies of each later questionnaire are usually mailed to each respondent, so that he can keep track of his statements from round to round.

Maintaining Respondent Participation.--Especially due to the lack of personal interaction, continuing total respondent participation is difficult to maintain. This "respondent dropout" may occur because of competing time constraints or because of lack of interest or alienation when the particular respondent's position appears to be in a "hopeless minority." It is the responsibility of the Design and Monitor Team to see that "respondent dropout" is reduced to a minimum. This necessitates frequent telephone conversations with the respondents: informing them that a new questionnaire is in the mail to them; reminding them to complete the questionnaires and mail them in on time; and, cajoling "drop-outs" into completing the exercise because their opinions are vital to the success of it.

It is generally standard procedure that Delphi respondents are reimbursed for their participation. The size of this reimbursement varies anywhere from as little as $20 to as much as $100, depending upon the difficulty in securing agreement to participate. This payment serves not only as a compensation for their time expended, but also tends to instill in the respondents a higher sense of commitment and responsibility to the project. When an individual respondent realizes that his responses are so valuable to the success of the Delphi, he is less likely to discontinue his participation before all rounds are completed.

Maintaining a Workable Communication Structure.--In some instances, the respondent group may overconcentrate its efforts on some issues to the detriment of the consideration of others. This may occur because the respondent group finally obtained was not as diversified as needed or planned for the total scope of the exercise. With proper knowledge of the subject material, the Design Team can stimulate consideration of the neglected issues by interjecting comments in the summaries for consideration by the respondents. It is a matter of the integrity of the Design Team to use this privilege sparingly to stimulate consideration of all sides of an issue and not to sway the respondent group toward one particular resolution of an issue.

The process of designing a workable communication structure for any specific Policy Delphi appears to be more of an art than a science. However, a number of general reasons for failure have come to light from some of the less successful attempts:

· Utilizing a blank sheet of paper on the first round and thereby implying that the respondents should waste their time educating the Design and Monitor Team;

· Poor techniques of summarizing and presenting the group responses and insuring the common interpretation of the evaluation rating scales utilized in the exercise;

· Ignoring the fact that respondents to a Delphi are acting in a consultant role in what may be a demanding exercise, and should therefore be involved as a part of their normal job function, or should receive normal consulting fees for participation; and,

· Ignoring or not fully exploring disagreements so that discouraged dissenters drop out and an artificial consensus is generated.

5. Data Reduction

Analysis of a Policy Delphi consists primarily of subjective judgments and interpretations of the Design Team. As the responses of the various interest groups are reviewed over all rounds, the Design Team can fit the respondents' reactions into a general scheme derived from their understanding of the process of the group's reactions. This "content analysis" of the group response is classified in such a fashion to allow similar attitudes to be grouped together and later to provide important insight for the User Body into the following areas:

(1) They will be able to identify the effect that new information had on the strength and durability of some of the major opponents' positions. For example, it may be found that several of the most vehement objections were based on misinformation and subsequently decreased in strength when more information was provided. This finding could reveal the necessity for a new or improved approach to introducing the opposed highway plan to the public or for the need to inform the public before introducing the plan.

(2) Certain opposing positions can be identified as firmly held, without shift or compromise, by noting those cases in which new information produced no change whatsoever in the attitudes of the proponents of those viewpoints throughout the Delphi rounds. This provides the planning committee with a list of objections that will be encountered and must be overcome if their future efforts are to be productive.

(3) And thirdly, common interests can be identified among the various opposing interest groups that can be useful in supplying a list of possible negotiation points that the planning committee can put to future use.

6. Timing

At least one month to six weeks should be allowed for the advance preparation stage for the Policy Delphi, depending upon how difficult respondents are to locate, how much time the education of the Design Team will require, etc. During this period, the User Body must meet with the Design and Monitor Team to discuss the issues to be considered and decide what objectives the Delphi exercise is to meet; the types of panel respondents must be decided upon, (identified through the processes described earlier); the initial information pages must be prepared for mailing to the respondents; rating scales should be developed; and the first-round questionnaire must be completed.

An actual "round" of a Delphi exercise will take approximately two weeks, from the initial mailing of the questionnaires to the summarizing of the responses and preparation of the following questionnaire. This two weeks varies with the promptness with which the respondents return their responses and depends a great deal upon the dedication with which the Monitor Team devotes itself to telephone encouragement of the respondents.

A Policy Delphi usually requires at least four to five rounds. This is often the result of the necessity to reword some of the positions as described by the respondents and the inherent difficulty in common interpretation of written statements on policy issues. On some issues where strong polarization exists in the respondent group, it has been discovered that each side on obtaining the summary of the first round does not really believe that the other held so completely different a view and felt that a few casual comments would shift the other groups to their "logical" position. Upon getting the results of the second round this belief is usually shattered. In essence, it is sometimes not until the third round that the majority of the respondents react to seriously polarized issues.

Processes Involved

In general, the Policy Delphi procedure has two features; (1) anonymity; and, (2) controlled feedback. Anonymity effected by the use of questionnaires or other formal communication channels, such as on-line computer communication, is a way of reducing the effect of dominant individuals. Controlled feedback--conducting the exercise in a sequence of rounds between which a summary of the results of the previous round are communicated to the participants--is a device for reducing noise.

There are several properties of the Delphi exercise that should be pointed out. The procedure is, if handled expertly, a relatively efficient way to "cream the top of the heads" of a group of knowledgable people. In general, it involves much less effort for a participant to respond to a well-designed questionnaire than, for example, to participate in a conference. A Delphi exercise, properly managed, can be highly motivating environment for respondents. The feedback, if the group of respondents involved is mutually self-respecting, can be novel and interesting to all. The use of systematic procedures lends an air of objectivity to the outcome that may or may not be spurious, but which is at least reassuring. And finally, anonymity and group response allow a sharing of responsibility that releases respondent inhibitions.

Experience has shown that the solutions produced during an exercise have a high degree of acceptability to those involved in it. Respondents are usually motivated to help in any community action that is indicated for the future.

Positive Features

In addition to advantages described in earlier sections regarding the anonymity provided the respondents, controlled feedback and generation of typical respondent group support for the ultimate decisions to be implemented, the Policy Delphi has other positive features.

Certainly one asset the Delphi shares with Focused Group Discussions is the diversity of opinion they bring to bear, thus minimizing the possibility of overlooking some obvious facet of a question. This property is enhanced by requesting all participants to state the reasons for their position statements.

The "worksheet" process insures that all respondents have carefully examined all position statements from the various interest groups participating in the Delphi, thereby hopefully assuring that stated opinions and beliefs are more firmly based on complete information than those obtained through survey techniques.

The limited time utilization of the respondents allows the use of individuals in the respondent group who may not have the available time required for participation in committees or other group mechanisms.

Because there is at least a two week lapse between Delphi rounds, the respondents can discuss issues with members of the community groups they represent, thus providing the possibility that the respondents' statements are representing more than just their own personal opinions. This facet of the Delphi is an advantage over the Focused Group Discussion.

As previously noted, the questions included in the Delphi exercises can be more complex, and can therefore delve deeper into underlying assumptions than is possible with a survey.

Because the interaction process in the Delphi is not on a face-to-face basis, many mechanisms are avoided such as:

- The domineering personality, or loud-spoken individuals that take over the group process.

- The unwillingness of individuals to take a position on an issue before all the facts are in or before it is known which way the majority is headed.

- The difficulty of publicly contradicting individuals in higher social positions.

- And, the unwillingness to abandon a position once it is publicly taken.

The mail questionnaire technique also many times makes it possible to include respondents who would not be able to participate in a group or committee meeting procedure that requires traveling to a designated meeting place at a specified time. The Policy Delphi enables an individual to respond without leaving his home or office, and he can respond at his own convenience even if that convenience happens to be at 3 o'clock in the morning. This feature also is an added convenience for the Design and Monitor Teams. They do not have to contend with juggling meeting times to suit individual respondent's personal schedules, in order to find a date and time which allows them to secure the participation of all respondents.

Finally, the series of rounds reacted to by the respondents over a period of time provides a unique insight into: The strength and durability of positions held by various interest groups, possible points where opposition must be met and contended with and, possible negotiation points to be utilized in eventual implementation of a proposed program that cannot be obtained with other mechanisms.

Negative Features

In addition to the considerations for implementation discussed in previous sections (considerable advance preparation by the Design Group, development of rating scales, and the number of rounds which would extend the actual Delphi process to at least 10 weeks), there are other constraints which should be brought to attention.

- The non-random selection of respondents limits the ability of the Delphi method to avoid drawing a biased or non-representative sample, as opposed to a scientifically selected sample such as those used in interviewing practices.

- Unfortunately, the less literate segments of the population find it difficult to respond to such a technique. This limitation usually reduces the number of respondents who can represent the disadvantaged, lower socio-economic, or less-educated groups within the community. In the case of transportation planning, this is a serious shortcoming because the decisions to be made will affect all residents of the community regardless of social or educational status.

- Mail questionnaires lower the chance of maintaining a 100 percent response rate, thus requiring staff time spent on follow-ups of non-returnees.

- Another potential limitation of the Policy Delphi exercise is severe constraints on the diversity of the respondent group and the resulting limit on the meaningfulness of the exercise. The Delphi exercise seeks to, initially at least, explore any alternative introduced by any single respondent even if it is known to be in direct conflict with the intentions of the planning body requesting the exercise or with the rest of the respondents. As a consequence, we have the following possibility:

An item under consideration in the Delphi may be lifted out of the context of the exercise and made public by one of the respondents as a supposed item under consideration by the planning body.

One can see that the chance of this occurring increases with the increasing diversity of the respondent group. While the design team can suggest the amount of diversity required to explore adequately the issues in question, because of the above risk, the choice or approval of the individuals making up the respondent group should be the prerogative of the planning body.

- The secretarial workload is comparatively massive and is not well distributed, time-wise, during the re-design period between the rounds. This could be cut to some extent by the use of one of the on-line text editing and composition systems now available on a number of time-shared computer systems. If the exercise happens to be in an environment where each respondent has access to an alpha numeric display terminal tied into a central computer, much of the tedious work in the summarizing of the voting could be automated provided the available text handling software is flexible enough to allow quick modification, by non-programmers, to a Delphi control program.

- Also, it may be more convenient and effective to obtain the participation of the respondent group on a continuous basis for three to four days. This would provide a "total involvement" atmosphere for the respondent, but possibly eliminate their "re-think" time on the subject material and their ability to check back with their groups as is allowed with the two week program.

- And finally, the results of the Delphi exercise can be summarized, only by an entirely subjective or intuitive analysis by the professional Design Team. Thus these results can only be considered as opinions and not as "hard facts."

Costs Involved

Policy Delphi exercises will vary in cost depending on the number of rounds executed, the number of respondents participating, the complexity of the issue to be considered, the difficulties in identifying respondents and persuading them to continue participation, etc. When trying to estimate the total cost of a Policy Delphi, it is necessary to take the following into consideration:

- The professional Design/Monitor Team fees (and expenses) for design of questionnaires, implementation, analysis and report writing;

- The cost of clerical, secretarial staff time for typing questionnaires, tallying responses, and following-up on "drop-out" respondents;

- Reimbursements or "consulting fees" paid to respondents, if necessary; and,

- Postage, phone bills, duplicating and printing costs.

Program Utilization

A review of the literature reveals that the greatest use of the Delphi technique has been in technological forecasting. Regarding policy issues, however, the Delphi has been used to assess the needs of older Americans, to define public service needs of urban residents and to assess attitudes toward Civil Defense Programs and policies.

The Delphi technique has also been used to establish occupation safety hazard levels, to study the impact of ratings of safety and cost of operation of new automobiles, on the sale of new automobiles and secondary impact on gasoline usage and employment in the auto industry, to determine the future role of public broadcasting and its impact on the banking industry, and to study the trends in utilization of photo-voltaic solar energy devices.

SCENARIO

Strategic planning assumes some image of the future. This is required to identify the needs to which the planning is responding. The image may be no more than a population projection, a historical growth trend, or an anticipated shortage of a single resource--but there is always some image of the future.

The development of scenarios is simple the act of describing more comprehensive images of the future and providing alternative images so a wider range of alternative assumptions can be examined. Scenarios are "word pictures" of what the future would be like.

The relevance of scenarios lies in the following: Plans and forecasts are based explicitly or implicitly on images about the future. Hindsight shows that our images about that "true" future have been, usually, far from correct or complete. Therefore, the scenario concept also could be described as contingency planning, which, has long been practiced by governments. A scenario means a possible future, however, not the most probable future. By studying a number of scenarios, hopefully one can identify those future events that would be truly significant and which would call for a major shift in plans. For example, a United States oil company should consider scenarios that include different assumptions about our oil import quota policy; an automotive firm should consider scenarios that include different degrees of technical progress and social acceptance of various types of automotive power.

In the past,man's attitude toward the future has been passive or when he has looked toward the future he was merely extending past trends.

Past trends influence very strongly the next five years, therefore strategic planners must look more distantly and take enough advance time so that the voluntary actions become noticeable. These voluntary actions can alter the direction toward a possible future and switch it toward another. So the trick is to formulate a policy based on the image of the future and come up with a viable plan for the future that will guide the community in the "correct" direction. Remember however that the planning process should do the following three things:

1. The planning process should protect and create options.

2. The planning process should identify those decisions beyond which we are committed and may "kill off" a desirable future.

3. The planning process should provide visibility to the assumptions made in planning, and provide a system for reviewing the validity of these assumptions and selecting other future throughout the duration of the implementation phase.

Advantages of Developing Scenarios

As a component of the strategic planning procedures presented in this study, the development of scenarios has a number of advantages. These include:

1. Making the image of the future visible and explicit.

A major goal of the strategic planning procedures is to make all assumptions visible and explicit. When visibility is created, future decisionmakers can verify that the image of the future which served as the basis for a plan still applies. Obviously, if the image of the future does not describe the reality of the future, the plans developed will not be appropriate to that reality. Present planning techniques often do not explicitly identify the assumed future upon which they are based. The development of scenarios is one way to make these assumptions visible. Periodic reviews by the future decisionmakers will be needed to re-examine the match between reality and our images of the future described in the scenarios.

2. The development of alternative scenarios allows for a closer examination of premises.

When presented with contrasting images of the future, the planner is forced to more carefully examine the premises underlying any planning and cannot proceed with the simple confort and assurance that there is any single most probable future. While total uncertainty is crippling, effective planning must still proceed with an appropriate humility in face of the future's insistence on "doing its own thing" despite the best laid plans.

3. Alternative scenarios serve to "bracket" the range of potential happenings.

If there is no ability to predict the future then no plans can be made. If predictions of the future contain too specific an image of the future they run grave risk of differing substantially from the reality of the future. In developing alternative scenarios we are saying in effect: "We can't tell exactly what the future will be like, but having examined a number of different premises we can tell you that we think the range of possible futures is from here to here." The scenarios serve to "bracket" or establish limits on the range of future possibilities so that the future can be addressed, without at the same time limiting the planner to a single set of premises.

4. Scenarios provide a more comprehensive picture of those factors--and the interrelationships between the factors--which can affect the future.

Because the present state of planning is rarely comprehensive--there is transportation planning, water resources planning, energy planning, economic planning, foreign relations planning, etc.--the image of the future used to develop plans in any one of these isolated planning fields rarely consider the full range of factors which shape the future. The recent history of planning has been the continued unveilings of additional factors to which each isolated planning field had to pay attention. In the water resources field, for example, there has been a successive need for planners to consider the effect of water resources development on fish and wildlife, the impact of pollution control technology on water availability, the growth inducing effects of water resource development, the energy efficiency of alternative water supply methods, the political climate for export of food products, and on and on. The image of the future upon which much planning is based often addresses only those factors which have direct relationships to the immediate area of planning; yet everything we now know about social systems suggests that social effects are rarely caused by any single factor, but rather are the result of highly complex interactions between a number of factors. Those "causal" factors which each isolated planning field considers to be all important, such as population projections, are often byproducts of the interrelationship between much more basic economic-political-social-mythical events. Since scenarios identify a much wider range of factors, and since the comparison of scenarios provides some understanding of the interrelationship between factors, there is a greater likelihood that these planning procedures can produce an understanding of the system which will produce the future, not just the byproducts of that system.

In sum, the scenarist should strive for a consistent, well researched and detailed set of circumstances that are sufficiently plausible that the participants can understand and identify the situations, conditions, and strategies that prevail. Credibility and consistency are the key qualities. One operational test of credibility might be the degree of acceptance by participants of the scenario. This is not to say that the writer should be timid and avoid predicting future events, but he should not permit himself to become such an avid crystal-ball gazer that he seriously distorts the fabric of the scenario. The scenarist who attempts to wear the mantel of the seer will produce such conservative scenarios as to vitiate their applicability; they will hardly "stretch the mind."

Procedure

In composing scenarios for strategic planning the first consideration will be the time setting. For a policy to produce a plan and a plan to help guide the community to a particular probable future, the time setting should not be so near as to have current events overtake plans as they are being formulated. A time setting too close to the present would not give the decisionmaker an opportunity to implement changes, whereas a setting too far removed chronologically might not command his attention. The time setting, then, should be viewed as fundamental decision for the scenario. The scenario should not ensnarl the players in current events, nor should they be confronted with events projected so far into the future that current perceptions, strategies, and policy implications are undermined by uncertainty and rendered useless.

A second important consideration involves the level of evaluation. Depending on whether the scenario is of national or local focus decides what detail the scenario should be. Too much detail bogs down the scenario writer with trivial data and distracts him from his overall purpose. Too little detracts from the comprehensiveness of the scenario. The tradeoff for detail and simplicity varies from situation to situation but the balance should be thoughtfully considered.

Credibility is an issue of major concern to the writer throughout the scenario; however, it is at the composition level that credibility must be directly treated. This issue has two primary considerations. First, credibility and prediction accuracy should not be confused or interchanged. "Critics of the credibility of scenarios must recognize that preparing a well structured scenario and predicting single future events are two different things. In the case of predicting single events, one mistake invalidates the whole effort, but in a well-developed scenario, the weakness of a single element is compensated for by the credibility of the remainder." DeWeerd's point is well taken. A plausible and consistent set of conditions-carefully researched, without unexplained or radical alteration from the present environment-is the hallmark of a good scenario. This criterion should be violated by incredible or illogical elements or events only if the research objectives should so demand.

The scenarist must be careful not to bias his scenario unconsciously so as to make some options more attractive than the others. Also, such a menu might possibly limit a person's capability and incentive to devise novel options. That is, the scenario should present a situation that permits-indeed, encourages-the exploration of a wide variety of levers, old or new.

The technique of writing a scenario is not a "cookbook" process. It involes time, imagination and objectivity. There are no rules for establishing a structure for a scenario and ensuring that the structure will be flashed out in a systematic and exhaustive way. There are many techniques currently used to generate scenarios, three of the more common are:

1. Consensus Techniques
2. Iteration Through Synopsis
3. Cross-Impact Matrices

In the consensus technique, groups of experts in various fields are asked what major events they might anticipate in a specified future period. The experts interact through a Delphi process. They remain anonymous to each other and answer questionnaires which seek reasons for minority positions. These positions are then fed back to the group members who are then asked to evaluate their estimates. One could summarize the method as a consensus of "wise old men." The disadvantages are that the biases introduced by the present are not completely netted out; only certain types of items are included and mutual interactions and dependencies are obscure. In most cases the data is also nonquantitative, thus limiting its usefulness for indicating such things as market size.

Ronald Brech in his book Britain 1984 used iteration through synopses to develop his vignette of Britain in 1984. This method is designed to increase interdisciplinary consistency in the scenario. It consists of developing independent scenarios for each discipline and then modifying the descriptions through an interactive process which makes the scenarios compatible with one another. Problems arise when disciplines, such as sociology, must remain compartmentalized because of the difficulty of estimating their effects on other fields.

A third, and potentially powerful method of scenario generation is the use of cross-impact matrices. Gordon and Helmer describe the technique as a:

> --method of analysis which permits the orderly investigation of the effects of potential interactions among items in a forecasted set of occurrences. It requires a methodical questioning about the potential impact of one item, should it occur, on the others of the set in terms of mode of linkage, strength of linkage, and time when the effect of the first on the second might be expected . . . . Having collected the judgments or data linking all possible combinations of items in terms of mode, strength and time, it is possible to perform an analysis which revises the initial estimates of probability of the items in the set.

The principal problem is the use of subjective probabilities and subjective measures of effect which occurs in a compound iterative process. Constant multiplication of subjective numbers creates a scenario whose probabilities are highly subject to error. A second problem is the built-in bias generated by starting with fixed relationships which assume cause-effect relationships to be identifiable in the future on the basis of today's thinking.

The advantages and disadvantages of each of these three techniques, consensus, synopsis, and cross-impact matrices, are summarized in Table 1.

Each of the three methods described has inherent advantages and disadvantages. All three share three common faults: the generation of a single picture of the future (albeit one can alter variables to test their effect) instead of a range of possibilities; bias in future interrelationships stemming from the use of today's perceptions; and lack of emphasis on variable identification.

The technique which we will discuss combines parts of these techniques and avoids their pitfalls. It consists of the following steps:

1. Identify factors which affect the future.
2. Selection of those variables that bear directly upon the design and structuring of public policy.
3. Identify themes.
4. Develop future scenarios based on these themes.
5. Identify most desirable plan for each scenario.
6. Cross-impact each plan.
7. Develop an operating plan.
8. Identify assumptions for major decision points.

1. Identify factors which affect the future.

Our first step is to figure out what social, political, economic, or environmental factors will affect the future of the study are. These may include things as diverse as energy availability, public health standards limiting the use of waste water, availability of public transportation, local controls on construction, technology for controlling weather, crop failures in Asia, or lifestyles.

2. Selection of these variables that bear directly upon the design and structure of public policy.

From these factors, variables are selected that are the most relevant in terms of the planned use of scenarios. The variables therefore are selected for their individual contributions to the definition of the definition of the threat to public policy. Contributions are based on content analysis on the various forecasts. By doing this the variables are identified which were part of the logic process of the forecasters and indicates the existence, although not the strength, of relationships and interdependencies.

3. Identify Themes

Some of the factors are so important that a major change in that factor could in itself create a fundamentally different future. The other factors are "dependent" in the sense that if this one factor changes, then all the others are affected accordingly. We have called these major factors "Themes," because they can serve as a core--a Theme--around which we can organize projections of what the future will be like.

4. Develop alternative future scenarios based on the themes.

Each of them then serves as the basic premise around which a scenario is written. One way in which this can be done is to evaluate each "dependent" variable in light of that Theme.

These evaluations can then be combined into a single word picture describing the most probable version of the future assuming the particular theme. We are calling these descriptions of alternative futures "scenarios."

These scenarios, once developed, will not only describe what the future will be like, but will also have an "internal logic" that will allow us to project probable population, development patterns, attitudes toward future development, acres in irrigation, cropping efficiencies, etc.

5. Identify the most desirable plan for each scenario.

We now play a "what if" game, and try to decide: IF this scenario is the best estimate of the future, what would be the best plan to meet the demands described in the scenario. This is done for each scenario.

6. Identify decision-making sequence for each plan.

We then continue our "what if" game a little more, and try to figure out what decisions we would have to make and in what sequence IF we were to implement the plan. This is done for each plan. Where possible, we even put time estimates on when decisions would have to be made. For example, some decisions might not have to be made until 1990; other must be made right now.

7. Cross-impacting each plan.

The reason we go through the process of identifying each plan and all its component decisions is so we can then study whether, if we were to implement one plan, we could still carry out the others. This is called "cross-impacting." Each decision is evaluated as to whether it is a "high-cost decision" or a "low-cost decision." "Cost" means any loss of our flexibility to implement another plan. A "low-cost decision" can be made without a loss of flexibility, but a "high-cost decision" "kills off" another desirable option. Sometimes apparently modest decisions turn out, upon analysis, to be very "high cost." Other times we can design a plan in such a way that it still meets needs while minimizing or avoiding "high-cost decisions" that have been identified in our analysis.

8. Developing an operation plan.

But we still have to have some plan of action, so we now develop an operating plan. The operation plan is developed with the goal of preserving as many of the desirable options as possible and making "high-cost decisions" no sooner than they need to be. If decisions don't have to be made until 1990, why make them in 1975 when they can be made in 1990 with then current data and in consultation with the concerned public of that time? On the other hand, some decisions must be made now just to preserve our options in 1990. This operating plan is the actual plan that will result from this study. (The operating plan finally developed does not resemble a single plan--such as this early description of the procedures to the public implies--but rather shows a range of alternative choices available at each of the "high-cost decisions.")

9. Identify assumptions for major decision points.

In the process of developing any plan, even one designed to preserve options, we will have to make assumptions which over time may prove incorrect. Since our operating plan builds in a logical point for review every time we hit a "high-cost decision," we can strengthen our decisionmaking at these review points by also documenting the assumptions that would go into making that decision. We might, for example, indicate our assumption as to a rate of population growth which would create sufficient demand to justify the project. This list of assumptions will then serve as a guide to future decisionmakers juncture they can be certain either the assumptions are "on target," or that major revisions need to be made in the plan.

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CHAPTER 13. GOAL AND OBJECTIVE SETTING

Attitude Surveys and Task Forces represent opposing approaches to the determination of goals and objectives. Attitude Surveys can only measure inductive goals, that is present goals of individuals and groups. It is purely empirical. Task Forces, on the other hand, can formulate deductive goals, those which logically would resolve a problem and/or be appropriate to an anticipated future condition. Strategic planning must attend to both types of goals.

ATTITUDE SURVEYS[1]

1. Background

As a relatively inexpensive way to gather information, attitudes and opinions from a large number of people, the survey has many positive features. It provides planners with the information they need to make policies which will have the most chance for success. It is the only technique, other than talking to every citizen, which is capable of being statistically representative of all citizens, including the "silent majority." The survey thus measures opinions and attitudes in a way which allows planners to understand the depth and magnitude of various points of view. As such, it provides an aid to planning. In an era of change, where important issues revolve around people's responses to major events, it is valuable to contact the people affected to learn about and understand them better--for example, one can ask people what has changed, how it changed, and why they feel as they do about the change.

The survey has two important advantages over other types of data collection procedures. First is the possibility of designing a survey with a degree of precision which will permit the projection of results to the whole population. Appropriate sampling procedures can create a survey which is truly representative of the population from which the sample was drawn. Second, because it can reach out to every segment of a population, a survey can reach the "silent majority" whose views would otherwise be missed through hearings, group discussions, etc. The inclusion of all elements of a population--even the silent elements--is what gives the survey the potential for being truly representative and projectable to the total population. As will be noted later, the survey is not truly interactive; citizens cannot communicate directly with the planners and policy-makers and have their concerns answered directly; nor do they interact with each other. Citizens may thus feel they have been able to speak their piece, but they receive no response and may well feel that nothing will happen as a result of the survey. Thus, a survey cannot be construed to be a substitute for interpersonal communication between citizen and planner.

On the other hand, acting solely on the basis of majority rule may be misguided. The fact that 25 percent of the population is indifferent to a particular highway route and 50 percent favor it does not mean that implementing the proposed highway will not be hampered by citizen protest. It is well documented that a small, but active, minority can effectively delay a project if their needs are not addressed. Thus, the purpose of a survey is not simply to get a vote from the public, but to try to determine the rationale behind the vote, so that planners can work to ameliorate fears and concerns of citizens and to facilitate the planning process. The survey must be considered an aid to understanding the population, a guide to planning, and a key to the type of informational and educational programs which may be necessary.

Surveys are best used when they are designed to reflect the total population's attitudes and opinions, when the findings can be shared with the population for greater mutual understanding by all, and when plans are made to include as many of the identified viewpoints as possible, not simply the most frequent viewpoints. Identifying all of the values in the population is crucial to forming plans which will be successful in reflecting the greatest welfare for the community.

In recent years four trends have gathered speed to work against the success of any survey. One trend is that more and more people appear to be uninterested in taking part in a survey. This has been caused in part by social scientists themselves--too frequent surveys, with poorly designed or inappropriate questions, raising the hopes of the respondent without justification, and disregard for the feelings and rights of respondents. The second trend concerns the increasing number of people who are afraid to talk to interviewers either in person or on the phone due to the heightened impact of fraudulent salesmen, robberies, and assaults. The third trend involves the increasing concern by citizens about the invasion of their privacy. They worry that any data collected may be misused against their own best interests and thus are unwilling to respond to a questionnaire of any type. A fourth trend has been more prevalent among minorities or those holding minority viewpoints (e.g., those holding extreme conservationist views, those calling for decreased government roles in transportation, education, etc.), the feeling that they have been surveyed to death and nothing has ever come of it--e.g., the futility of responding to questions because surveys do not lead to action or change.

However, significant advances in the state-of-the-art of surveys have worked in favor of the success of surveys. Social scientists have diligently worked to develop questions which will more accurately reflect the respondent's true feelings and more reliably predict their likelihood to behave in a given way. A great deal of effort has been placed on "life style analysis," in recognition of the fact that there are many elements in an individual's background which affect his behavior, and that these elements combine in different ways to produce different life styles and behaviors. For example, within a particular household, income and education category, life style is dramatically affected by the number of people in a household contributing to the income and by their expectations of future earnings.

Technology has also made a significant contribution to the art of surveys. Special computer programs have been designed to analyze survey results more quickly and thoroughly than ever before. Prior to the computer, summarizing the results of a survey sample was not possible, since the deadline for decision-making did not permit the time it would take to tabulate results by hand. Now, with the proper planning and design, computer tabulations can be available instantaneously in some cases, and within a few days in most other cases. Moreover, the tabulations can include weighting of some answers, the formation of scales to grade others, and results which can be summarized in a variety of ways. Sophisticated programs have been developed which can select variables according to their importance in determining or correlating with other variables.

With the progress in social science and technology, the survey has an exciting potential to serve as a tool for gaining citizen input for highway planning. The discouraging trends of citizen resistance to surveys and guarding of privacy cannot be ignored. They must be recognized and addressed with positive and creative countermeasures. Publicity in the local papers about the survey and its goals is only one example of a way to enlist the interest and participation of the citizens. In some communities, interviewers must register with the local authorities before contacting residents. More thought can be given to providing potential respondents with meaningful credentials, such as a letter preceding the interview which explains why the study is being done and which gives a phone number where a worried respondent can call to verify the legitimacy of the survey. At the very least, personal interviews must include a calling card of some type to leave with the respondent after the interview is completed.

2. Various Focus Possibilities

The words "attitude" and "opinion" are often used interchangeably, but it is helpful to distinguish between the two. There is general agreement that the term "attitude" refers to a person's deeper and more permanent emotional evaluations, while the term "opinion" refers to a person's more changeable intellectual views. Each concept can be dealt with in a survey. For example, a survey might gather information to assess a citizen's opinion on a particular highway in light of his attitudes toward growth and development of his city.

In addition to attitudes and opinions, surveys can also be designed to collect a third type of information: to assess citizens' knowledge of the subject at hand. This serves as a valuable tool in understanding how to deal with the expressed attitudes and opinions, and ways which some opinions might be changed. Those who have negative attitudes and opinions and have a high degree of knowledge of the subject are to be reckoned with in a different manner than are those who are also opposed but have no knowledge of what they are talking about. This latter group may well have opinion change if given access to factual information. If it is appropriate to the purpose of the survey, responses can be weighted based on the knowledge of the respondent.

To collect a broad base of information on the citizen's knowledge, attitudes and opinions on a variety of subjects would be a formidable task, and the resulting length of the interview is almost certain to lose the respondent's interest and cooperation. Thus, the designer of a survey must determine a focus for the interview,and include questions which are appropriate to that focus and thus to the goals of the survey.

The survey can be designed to include one or more of the following focus possibilities:

. To gather information on citizens' present knowledge, attitudes and opinions on a particular subject.

. To present a new idea or concept and collect citizens' reactions to the idea.

. To search for new ideas or modifications suitable for solving a problem.

. To measure change in attitudes and opinions over a period of time.

. To raise the consciousness of a group of people on a particular subject, and present new ideas for them to consider.

3. When to Survey

When to conduct a survey is dependent upon the focus of the survey.

If you want to collect baseline data of citizen attitudes, values, and opinions, the survey should be conducted before plans are developed for specific projects. These data then would be used by planners in the planning process. More on the use of data will be found in a later section.

If you want to test a plan on citizens, before the plan is finalized, a description of it should be presented via a survey. The data in this case would be used to amend the plan, as appropriate, based on citizen reactions.

If you want to get reactions to where a highway should be routed, the survey needs to precede final route selection. The same is true if you wish to get citizens to choose between alternate routes.

If you wish to measure changes in attitudes and opinions as a result of some intervention on the part of the highway department, two or more surveys are called for--one to measure the attitudes and opinions prior to the intervention; and at least one to measure them again after the intervention (e.g., after a media campaign to inform the public). If your desire is to give citizens an opportunity to have a voice in planning and you are not providing another mechanism (we suggest you should use other mechanisms in addition to a survey), a survey conducted well into the planning process, which merely allows a "vote" on alternatives, will not satisfy citizens who wish to be involved in the planning process.

4. Questionnaire Design

The design of the questionnaire is critical to the success of the survey. Improperly worded questions or incomplete coverage of the subject matter result in information which will most likely be wrong. This is worse than no survey and no results, for people tend to accept results as facts, regardless of their quality, and use them in decision-making. A poorly designed survey questionnaire can lead many well-intended decision-makers down the wrong road very easily.

General.--Questions should follow a logical pattern so the train of thought is easy to follow. Generally speaking, questions should be in a "funnel" order--going from general to more specific. Sensitive questions should not be placed at the very beginning of the questionnaire. The logic for including specific questions must be apparent to the respondent. With the right context, where the respondent can understand why questions are being asked, willingness to answer honestly will increase, and the sensitivity to some questions will decrease. In changing topics, a transitional sentence helps--e.g., "Now, a few questions about yourself."

Language should be simple and easily understood. Since people often have different frames of reference for words, care should be taken to define any such words which are going to be used. An example is the term "transportation"--does it include public and private transportation; are you considering air transportation, the transportation of goods (e.g., trucks), etc.? Thus, the exact context in which respondents are to consider the term "transportation" must be spelled out.

Questions which seek information based on the respondent's knowledge must be very carefully designed. In some instances, the respondent will not be able to give facts or answers accurately--

e.g., will the respondent remember how many miles he/she drove last year? In other instances, he/she will not have any information on the subject--e.g., the administration of Highway Trust Funds. It may be the intention of the survey to determine the degree of misconception and misinformation extant in the population, but where accurate information is desired, the respondent's limited ability to recall the past, and his inhibitions about responding to his present situation must be considered.

Questions should be asked in such a manner that all answers are seen as equally possible. While this is most critical with a telephone or personal interview, it also holds true for a self-administered questionnaire, since respondents do pick up subtle clues as to what answers are expected and may bias their responses accordingly. For example, instead of asking, "Do you think the proposed solution to our traffic problem will help the situation?" one might add, "Do you feel that other alternatives should be explored, or what?" In another case, the question, "Do you prefer Location A or Location B for the highway" could be changed to, "Do you prefer Location A, Location B, another location, or do you feel that no highway should be built?"

Respondent bias refers to the fact that fatigue and other factors such as a tendency to agree with statements consistently may work against a true response. To avoid this, questions which ask for agree-disagree type responses, for example, can be divided between positively worded and negatively worded statements.

For sensitive questions, sanctioning statements help to ease socially unacceptable responses. A classic example is in questions about voting, where rather than asking, "Did you vote in the last election?" one might say, "Many people didn't get a chance to go to the polls in the last election. Did you happen to go to the polls, or not?" In some instances, the issue may be sufficiently sensitive that it needs to be asked in the third rather than the first person (since people tend to project their own feelings on others). For example, rather than asking, "Would you take any action to prohibit highway construction?" one can ask, "On the basis of your experience in this neighborhood, do you think people will take any action to prevent highway construction, or not?"

Format.--There are two forms of questions: closed end, where the interviewer or the respondent checks an answer from given alternatives, and open end, where the respondent or the interviewer records the response in the respondent's own words. Examples of the two types are given below.

Do you favor locating the new highway north or south of Main Street?

North ____________ South ____________

Where do you favor locating the new highway?

____

Closed end questions are preferable where the information desired is factual (e.g., age, income, education, size of family, type of transportation use for various activities), where you want a measure (e.g., agree/disagree), and when the range of reasons is fairly well known (e.g., economic considerations, aesthetic considerations, etc.). They are obviously the easiest to deal with, since frequency counts can be made for each category.

Open end questions, on the other hand, allow for a great depth of response and greater insight into motivations, etc. As will be noted later on, open end questions are not particularly well suited for self-administered questionnaires, as people generally are more willing to talk than they are to write. Moreover, open end questions are more difficult to code and analyze.

If a question has closed end responses for "sensitive" questions such as age, income, and education, responses should include large enough intervals so that respondents feel "protected;" for example, income should generally not be grouped in \$1,000 intervals. Also, in questions about income and education no one wants to be in the lowest group (and for age, many do not want to be in the highest) so the first grouping (or with age, the last) should be small enough to exclude nearly everyone (for example, income under \$3,000).

When items to be included are the same items found in other data sources (such as the U.S. Census data) which may be used for comparison, care should taken to make corresponding categories for the comparison. For example, the U.S. Bureau of the Census uses the following income categories:

\$1 to \$999 or less

\$1,000 to \$1,999

\$2,000 to \$2,999

\$3,000 to \$3,999

\$4,000 to \$4,999

\$5,000 to \$5,999

\$6,000 to \$6,999

\$7,000 to \$7,999

\$8,000 to \$9,999

\$10,000 to \$14,999

\$15,000 to \$24,999

\$25,000 to \$49,000

\$50,000 or more

In grouping income categories, the categories should be compatible with the Census categories. For example:

__________ 1. Under \$3,000

__________ 2. \$3,000 - 6,999

__________ 3. \$7,000 - 9,999

__________ 4. \$10,000 - 14,999

__________ 5. \$15,000 - 24,999

__________ 6. \$25,000 or more

The questionnaire needs an introduction and a set of instructions. The former gives information about why the survey is being conducted and what will be done with the data (stressing anonymity). The latter informs the respondent or the interviewer how to respond to questions.

At times there can be more than one answer to a question. For example, a commuter might use car, train and bus to get to the city. Provision can be made for this type of situation by wording the question to allow for "multiple responses." Several can be checked (with equal rating) or the respondent might be asked to rank the modes in order of their frequency of use, by using "1" for most frequent, "2" for second most frequent, etc. Whatever is wanted must be explicitly stated for the respondent or the interviewer. Examples are given below:

Self-administered:	Please check below the *single most important* factor for not using public transportation (check *only* one).
Interviewer-administered:	What mode of transportation do you *most frequently* use to go to work? (check *only* one).

In a personal interview where a question includes a number of items to be asked about, it is useful to hand the question printed on a card to the respondent. The interviewer still records the answers on the form, but the respondent is able to see what he is being asked.

The layout of the questionnaire should look clean and uncluttered, and should be easy to follow. It is advisable to use two kinds of type, such as roman and italic--one for questions and one for instructions. Unless a question takes up more than a full page, it should not be split up between two pages.

Types of Questions.--Several types of questions can be asked. These include factual background questions (age, marital status, size of family, home owner or renter, income, education, occupation, years of residence, etc.), behavioral questions (modes of transportation used, frequency of various types of trips, etc.), attitudinal questions (attitudes toward public transportation, conservation, etc.), and knowledge questions (how well-informed the respondent is regarding: the impact of highway construction, mass transportation planning, etc.).

There are a number of ways of asking questions, particularly attitudinal ones. Many techniques are available, from a 5-point Likert-type scale (strongly agree, agree somewhat, neutral, disagree somewhat, strongly disagree) to the semantic differential, which asks respondents to place themselves along a spectrum bounded by extreme opinions, for instance:

Inconvenient _____ _____ _____ _____ _____ Convenient

Vacant _____ _____ _____ _____ _____ Crowded

Expensive _____ _____ _____ _____ _____ Cheap

etc.

In the spectrum type of question it is a good idea to have enough response choices (for instance, 5 rather than 3) so that respondents can express an opinion without being at the extreme end of the scale. Whole books and chapters are devoted to the measurement of attitudes, and anyone designing a questionnaire for this purpose would do well to review some of that material.[2]

In addition to questions "in words," it is possible to use projective techniques to gather information, such as questions "in a scenario." The respondent can be shown a picture of a situation (such as a highway built near a school and a factory) and asked to describe what is happening. A specially-trained analyst then can determine the feelings the picture arouses. Or, the respondent can be asked to draw an illustration of where they think a road should go, or what they consider the boundaries of their neighborhood to be. Sentence completion is another project technique. For example:

"The thing I like most about driving my car is ______________."

"If there's one thing I can't stand about using public transportation it's ____."

"People who think that no more highways should be built are ____."

It is often useful to make consistency checks and question-order-bias checks. The former consist of checks to make sure responses are consistent throughout the questionnaire. For example, one can ask about mass transit use in one place and then later ask questions relying on the earlier data. Responses to the two questions can then be compared for consistency. Inconsistent responses are a reminder that the survey results, while valuable, do not necessarily represent gospel truth in all cases.

5. The Scope of the Questions

The scope and range of topics covered in questions should be determined by analyzing the critical issues. For example, attitudes toward construction of a new highway facility in a neighborhood might be the major issue. The issue might be further broken down to specific issues:

- Do you feel the highway is needed?
- Where would you use the highway to go?
- What effect do you feel the highway would have on the value of your home?
- What effect would you feel the highway would have on your neighborhood?
- What alternatives to constructing the highway would you propose?

As many of the pertinent aspects of the issue should be covered as possible.

Often, the nature and range of issues is not clear. In this case, focused group discussions with a small number of participants may provide an excellent means for testing for major issues.

6. The Size of the Survey

The size of any survey is defined by several basic factors: the nature of the issues to be covered, the degree of accuracy required for decision-making, the money available for exploring the subject, and the time available for information collection. The overriding concern at all times should be the quality of information collected, not the quantity of data gathered. If time and money are severely limited, planners are better served if they concentrate on a smaller number of well administered interviews than if they are supplied with a great bulk of questionable data. If time and money are so limited that a quality survey is impossible, one should not be conducted.

The type of sample used, size of the sample, and type of interview conducted are the three major factors contributing to the quality of the survey. The first two factors are discussed below, with the third factor more fully described in the section entitled "Data Collection" beginning on page 257.

Type of Sample Used.--It is seldom possible or necessary to reach every member of the community population (nationwide surveys most frequently sample between 1,000-2,000 people). The sampling unit might be individuals, families or households, or groups (e.g., businesses, citizen organizations, etc.). There are many methods to select a sample, some of which give a statistically representative sample and some of which do not. The major consideration in choosing the method of sampling is the degree to which the sample selected will represent the total population. In a statistically representative sample, the survey results can be projected to indicate the views of the total population within given confidence intervals (e.g., "in 95 cases out of 100").

To achieve statistical representativeness, some form of a probability sample should be used. The first requirement of this procedure is to identify the population to be considered (e.g., all residents within certain geographic boundaries, all workers in a downtown area, etc.). A systematic procedure is then developed for the selection of respondents, in which the probability of being selected is known for each member of the population.[3] Simple random sampling is a method of sample selection that gives each possible element an equal probability of being chosen before the sample is selected. Systematic random sampling, a variation within simple random sampling is a mechanism whereby every nth element in the population is selected for the sample, with the starting point among the first n determined at random. The primary advantage of this technique, compared to the simple random sampling, is that it is easier and less costly to make the sample selections providing there is some list from which to choose every nth (e.g., a city directory, centers of housing, etc., in which every dwelling unit is listed and every nth dwelling unit can be selected). Stratified random sampling is aimed at avoiding certain types of sampling error coming from the other two methods. Most simply stated, it is a method whereby the total population is divided into a number of mutually exclusive subpopulations, each of which is sampled independently, using either the simple or systematic methods. All three methods are time-consuming and costly.

Deliberately oversampling certain subgroups of the population which have special importance for the objectives of the survey but are known to be a relatively small fraction of the total population is also possible. Weighting procedures can then be used to bring them back into their true proportion of the population for analytic purposes.

Other sampling procedures which are used do not elicit representative samples which is a severe drawback. "Non-probability" (where individuals do not have a known probability of being selected) samples are more convenient and less costly to administer. An "accidental sample"(e.g., street-corner interviews) is likely to be most convenient and least expensive, but cannot be considered to represent the true population. "Quota" sampling to make provisions to guarantee inclusion of diverse population elements (e.g., interview 11 blacks and 89 whites) is possible, as is a purposive sample when "hand-picked" cases are selected, but these are not random and therefore, cannot be considered representative of the total population.

Size of the Sample.--One of the first questions usually asked in planning a survey is "How many respondents do we need?" The answer is seldom easy, and is never "the more the better." Determining the correct sample size is a highly complex process requiring a pilot test to estimate distributions, decisions as to the size of error tolerated, and so on. The book by C. A. Moser that is cited in the bibliography has a good discussion of this process. As a practicality, however, most samples are not drawn in this manner.

It should be recognized at the outset that in taking the sample there is no easy solution to sample size, since the size of the sample depends on available resources, inherent variability of the data, comparisons and tests to be made, and so on. Samples are usually drawn using a rule of thumb. The sample size should be roughly 2-10 percent of the total population at interest; but not less than 400, nor more than 2,000 (although certain sophisticated techniques for choosing predictor variables require minimum samples of from 1,000 to 4,000).[4] A statistician can be valuable in helping to sort out priorities and determine the sample size.

The size of the sample and the type of sampling procedure will both affect the cost of the survey. If funds are limited, the type of sample selected may be a less expensive, nonrepresentative one, so that a sufficient number of respondents can be more easily contacted. It would be preferable, however, to modify the type of data collection, the length of the interview, or the size of the sample.

7. Data Collection

Having decided upon the scope and content of the survey, there are three traditional techniques for collecting the data. These are:

- Personal Interview
- Telephone Interview
- Mailed Questionnaire

In addition to these are less conventional techniques such as:

- Newspaper Questionnaires
- Magazine Questionnaires
- Television Questionnaires

If time and budget permit, a personal interview is preferred, since it is more flexible in terms of length, variety of techniques that are appropriate to it, and use of visual materials. A brief description of each technique's advantages and drawbacks follows.

Mailed or Self-Administered Questionnaires.--The self-administered questionnaire is least costly and generally allows a larger sample. Since this type of questionnaire most frequently relies on the use of the mails, however, the time required for the questionnaire to be "in the field" generally exceeds all others.

In cases where a considered response is desired, or you want a careful consideration of printed or visual material, mailed questionnaires allow more "think time" for respondents. On the other hand, they are not appropriate if you want "first reactions" or if you want the respondent's answers without consultation to peer groups, family, friends, and so on. Likewise, they are inappropriate when you wish to test knowledge (since respondents could obtain knowledge before responding), if you wish to use consistency checks (respondents can go back and change answers), if you wish an unaided question (where the data will later be listed), or if you need to have a certain sequence of questions (since the order in which a questionnaires is filled in cannot be controlled, nor can you control a respondent reading the whole before responding).

Those with lower levels of education find written questionnaires difficult to deal with and there is considerable danger of misinterpreting a question or an inability to follow directions (ranking, for example, is generally unwise in self-administered questionnaires, since respondents may not--despite instructions--rank properly; some may use 10 as best; some as worst; the presence of two 3's may mean a mistake or may mean equal weight; blanks may be a mistake or may mean a 0, and so on).

Respondents also have the least incentive to respond (they don't have to say "no" to anyone). As a general rule, this is reflected in two ways: an extremely low response rate (vis-a-vis other methods)--a "normal" rate is around 30 percent, and selective response to questions (e.g., more "refusals" on certain questions). Also, there is a general disinterest in having to write and the number of comments or the length of written responses is much less than when respondents are talking with interviewers. Since there is no chance to "probe" written comments, their meaning is often unclear.

Mailed questionnaires are obviously inappropriate where observations are needed (e.g., the state of deterioriation of housing was needed in conjunction with a survey on the impact of the property tax on urban blight).

Telephone Interviews.--With telephone interviews, the length of the questionnaire must be shorter. Long lists of things to which a respondents must reply are inappropriate, since they must be read and the respondent quickly loses interest. Semantic differentials are inappropriate for the same reasons, as is aided adjective selection. No visuals can be used with telephone interviews; this rules out Thematic Apperception Tests. Likewise, where observation is required, telephone interviewing is inappropriate.

Respondents feel less obligated to the telephone than to the personal interviewer, so the overall response rate and individual question response rates are apt to be lower than for a personal interview (but higher than for a mailed questionnaire). On the other hand, except for those without phones, there may be less bias than with personal interviews, where interviewers tend to avoid minority or crime-ridden areas and where respondents often refuse to open their doors to strangers.

Telephone interviewing tends to be quicker than personal interviewing or mail questionnaires. Random digit dialing although more costly than using telephone directories (because many numbers are not in service, are connected to businesses, etc.), does overcome the problems of unlisted phones. The number of unlisted phones is proportionately greater in such cities as New York and Los Angeles.

Like the personal interview, one can control the order in which questions are asked, probe for the exact response and clarify any questions the respondent might have.

Personal Interviews.--Personal interviews are most costly, most effective and can require special approaches in some neighborhoods. Nonetheless, they are the most flexible, and they permit the use of visuals and observations. Also, because of a feeling of obligation toward the interviewer, non-response--in total, and per question--has traditionally been lower than for any other method. This may change, and is changing, as people feel less safe in their homes and on the streets. Even today some cities are prohibitive for personal interviews. Quoted costs per interview in New York City, for example, now range from $50-75, as interviewers go out in teams and elaborate measures must be taken to get respondents to be interviewed. These may include prescheduling appointments, providing special identification for the interviewer, and selecting interviewers such as women and older persons whom people are most likely to admit to their homes.

Personal interview field work time tends to fall in between that of mailed questionnaires and telephone interviews.

In the personal interview one is able to control the order in which questions are asked. Thus, they are appropriate for a sequential type of question, for questions on knowledge, for asking unaided questions, for obtaining quick response answers without consultation to information sources, or significant others.

The interviewer also can probe responses to clarify meanings, to be sure the respondent understood correctly, and test a respondent's response (e.g., if two items were given an equal ranking). Interviews are easier for less well educated respondents, because reading is not required--or answers can be read for respondents.

Finally, because respondents can speak rather than write, responses tend to be more complete than with a mailed questionnaire.

Some surveys have been successfully designed to include a combination of these techniques to compensate for the drawbacks inherent to any one type. For example, personal interviews can be used to gather in-depth information on some subjects, supported by a larger number of telephone interviews to quantify other characteristics of the population. It is recommended that mail surveys be augmented by telephone interviews of nonrespondents to correct for nonresponse bias.

Less traditional forms of surveys are also possible. Surveys through the media have been successful in measuring the attitudes of self-selected participants. For example, questionnaires printed in newspapers and magazines have collected information from large numbers of readers. T.V. programs such as "The Advocates" have also conducted informal surveys on a variety of subjects. However, these methods do not tap the "silent majority," and are by no means representative of the whole community.

Each survey method might be used in several ways, depending on the objectives of the survey. For most surveys the "one shot" survey is appropriate, where contact with the respondent is limited to one interview and the data refers to one point in time. If changes and trends are required, "longitudinal" surveys are the appropriate method by which information is collected for two or more points in time. This can be accomplished by repeat contacts with the same respondents, or--less reliably--by asking a respondent about the present time and some time in the past during the same visit. It can also be accomplished (given a strict adherence to proper sampling techniques) by contacts with representative samples of respondents at different points in time. (The Survey Research Center at the University of Michigan has a yearly survey of households concerning finances, augmented by quarterly surveys. Although the actual respondents are different each time, sampling and interview protocols are such that trends in attitudes can be noted and compared over time.)

8. The Pretest

Before a questionnaire is administered to a respondent sample, it should be tested with a small number of respondents under the actual conditions of the survey. Each respondent should be asked to point out questions that were confusing or response categories that were confusing, misleading, or inappropriate. The questionnaires can then be revised, printed, and made ready for the survey.

9. Data Reduction

Responses need to be edited to make sure that there are no double answers where single answers were required. When this occurs in a list of responses, the higher numbered response should generally be used; for example, if response 2 and response 5 are both checked, response 5 should be chosen. Observation of respondent behavior has shown most often an individual will have checked the first number only to discover that a later number is more desirable and forget to change his initial response. If the answers are conflicting (e.g., "yes" and "no"), the next question should be reviewed to see if it indicates which is right. If not, the question is left blank. Open end questions are read and coded numerically, and each questionnaire is scanned to eliminate those interviews which were improperly completed. At this point, each respondent is assigned a unique identification number for entry into the computer.

Except in unusual cases where the amount of data collected is small, it is advisable to design the data collection instrument (questionnaire or interview guide) so that the data can be tabulated by computer. Many computer programs have already been designed to cross-tabulate and analyze questionnaires. Whenever, possible, the survey instrument should be designed to fit an existing program package, to avoid the time and cost spent in developing a new program.

There are several ways for data to be entered in a computer; normally the second way is preferred.

- Answers can be transferred to a code sheet, then keypunched onto IBM cards or computer tape.
- Answers can be keypunched directly from the questionnaire to card or tape, avoiding the code sheet process.
- Answers can be made on the questionnaire in a fashion that can be "read" by machine ("mark-sense").
- Answers from respondents can be entered on a computer directly.

The first two methods have the advantage of offering the opportunity for some questions to be content-analyzed. The first requires personnel time and another step in which errors can occur. The last two methods can offer a higher degree of accuracy since there is less chance for human error in coding or punching, but there is no way to catch a respondent's error in completing a question. Mark-sense questionnaires also need checking to see that there are no stray marks or crossouts on the sheet which will affect reading of the questionnaire. Their significant advantage, however, is speed. In the most sophisticated examples, tabulations may be extracted while the study is in progress and complete results obtained as soon as the study is completed.

In the computer processing, several functions can be performed:

- Weights given to particular subgroups.
- Consistency checks made to ascertain whether or not the respondent's answers on a particular subject are internally consistent.
- Editing to eliminate any unnecessary questions asked of a particular respondent (improper "skip" patterns, etc.).
- Formation of scales, combination of questions, etc.
- Frequency counts of each question, showing the number and percent of respondents in each response item.

- Cross-tabulations of various questions. Cross-tabulations can be of several types, including responses by background data (e.g., age, marital status, etc.), consistency checks (responses to one question by response to another), cross-tabulations of one attitude against another, cross-tabulations of attitudes against behavior.

- Multivariant analyses (to determine the ability of variables to predict attitudes/behavior).

- Tests of significant difference (to determine if differences are due to chance or if they are related to other factors).

Once the data have been tabulated in terms of frequency counts and cross-tabulations, it remains to analyze the data; that is, interpret the results by applying statistical estimation and testing techniques which lead to valid conclusions about the population group from which the sample has been taken.

An effective technique for determining statistical significance is provided by the chi-square (x^2) test.[5] In this application, the chi-square (x^2) test statistic is used to determine whether two variables are statistically independent. If someone with a statistical background is available, it is simpler to have that person handle the data analysis; however, a description of the x^2 technique is given in Appendix A. Another useful technique, described in Appendix B, the T-test, is particularly appropriate for before-and-after situations such as those measuring changes in knowledge, attitudes, or behavior.

Other standard statistical methods, such as regression and correlation analysis, should be applicable for interpreting the data. These and other techniques, far too numerous to describe here, are described in detail in the texts that have been cited.

10. What To Do With The Data

How the data is used in the planning process is a function of the objectives of the study.

The purpose of the analysis is not simply to get a vote by citizens on each question, but to understand behavior and attitude patterns of groups. These patterns can lend insight into publicity campaigns, to modifications of plans to meeting citizen criteria, and so on.

If the survey has been conducted to learn the attitudes, values and opinions of citizens, then citizen groups having distinct patterns of attitudes, values and opinions can be placed along a spectrum, can be numerically determined, and project planning can take these patterns into consideration. If measures of attitude change show no change in response to publicity campaigns, the campaigns should be altered. If knowledge is found to be low among certain groups, plans to reach that group with information appropriate to that group can be made. If a proposed alternative is found to be unpopular, but an underpass or bypass would revolve the situation, the more costly alternative may well be "cost-effective" in the end, due to lessened opposition.

It is difficult to deal with this subject in the abstract. Two examples illustrating the use of data follow.

(1) A study of recent purchasers of air conditioners sought to determine the purchase process, the impact of cost-of-operation and energy-efficiency data on the purchase process, and to test incentives for consumers to purchase high-efficiency air conditioners. The survey found that:

- Knowledge of cost-of-operation and energy-efficiency was low among those who had not attended college.
- Knowledge of cost-of-operation and energy-efficiency was not related to the efficiency rating of the air conditioner purchased.
- Consumers did not feel it costs much to run an air conditioner; they could not recall the efficiency rating of their air conditioner (although they could recall its BTU's).
- Shopping for a new air conditioner varied from no search (went to one store and bought the one air conditioner looked at) to high search (went to more than one store, looked at more than one model and more than one brand), but the nature of the search was unrelated to the efficiency of the machine purchased. Furthermore, the major reasons for going to more than one store centered around price and BTU's.
- A ban on air conditioners was projected to be most effective. Second most effective was seen to be a consumer information service. A $10 point-of-sale tax on inefficient machines was considered least effective.

From the data it was concluded that energy efficiency, despite all the attention paid it recently, was not a salient issue when it came to air conditioners. Purchasers were unconcerned with the cost of running an air conditioner, they did not act on their knowledge of efficiency differences in air conditioners, and generally were quite price-conscious, often shopping around for price. Why then did anyone buy a high-efficiency unit? It turned out that those that had bought high-efficiency units had high BTU machines. Due to the nature of wiring constraints where they lived, the only units they could buy with high BTU's had to be highly efficient. Those who had a choice, those with lower BTU units, overwhelmingly had low-efficiency units. Thus, the most effective incentive would be to ban air conditioners not meeting certain efficiency standards. Since most shoppers were low-search shoppers, they would be unlikely to go out-of-state to buy a less efficient (and cheaper) unit. A second type of incentive would be a cash rebate, on high-efficiency units (which the automobile dealers have recently used with some success). Many more consumers need to become aware of energy efficiency concepts; however, knowledge along is an insufficient incentive. Any incentive, it is clear, must be visible and direct at the time of purchase, rather than delayed.

(2) A manufacturer who specialized in wooden toys wanted to change his mix by adding some less expensive but durable plastic toys. The study sought to determine who bought wooden toys, their criteria for toys, and their reaction to plastic toys. A very strong positive statistical correlation between education and the purchase of wooden toys was found. Wooden toys (which the manufacturer had been selling under the word "educational") were described as "different," "durable," "developmental." In other words, wooden toys were seen as a cut above the rest because they lasted and could be handed down from child to child (and thus were "worth" their extra cost), because they had a distinctive texture which was pleasurable in itself and not harmful, and, because they were not working-model replicas like many plastic toys, they required the child to use imagination in the use--leading to more child development. Plastic toys were not well regarded, and interestingly there were strong feelings against guns and war toys among purchasers of wooden toys. It was recommended that the manufacturer advertise in magazines whose readers are well-educated, such as *Harper* or *Atlantic* (the manufacturer thought his purchasers were blue collar workers and was advertising accordingly), to continue his line of (expensive) wooden toys and to keep any plastic toys in his line toward the back of the catalog.

11. Timing

The three basic components involved in the scheduling of a survey are:

- *Development and Preparation of the Questionnaire* including identification of issues and questions to be asked, designing the questionnaire, administering a pretest of the questionnaire, incorporating any changes to be made, and finally, the printing of the questionnaire. This generally requires one to two weeks to complete.

- *Administering the Questionnaire* including the training of any interviewers, distributing the questionnaire, and conducting the interviews (or waiting for mailed returns), with a follow-up on missed respondents or non-response. The time required will vary depending on the number of interviewers available. The telephone interview period might take 1-2 weeks, the personal interview 2-3 weeks, and the mail questionnaire 3-4 weeks.

- Analyzing the Results

including the editing, processing and computer tabulations, followed by the synthesis and reporting of results. This requires from 1-4 weeks, depending on the complexity of the task. Individuals without experience with surveys may require double these times.

Potential for Resolving Issues

In conducting a survey, contact with the citizenry is primarily found in the development of the questionnaire (if citizens are contacted to identify issues and subject matter) and the actual interviewing itself (where citizen opinions and attitudes are collected). These are stages where citizens are providing inputs to the policy formation stage of planning. During these stages, there is little opportunity for resolution of issues. However, there is much to be gained through the public relations aspect of reaching out to the public for answers to existing problems and in adopting appropriate means of interacting with those citizens who have been identified as concerned about or opposed to the program being planned.

The processes involved in conducting a survey vary from one situation to the next. The amount and nature of contacts with citizens depend primarily on the focus of the survey. Gathering information on citizen knowledge, attitudes and opinions generally involves a minimal amount of citizen interaction and participation. However, in some in-depth interviews where new ideas or concepts are explored, or where new ideas or modifications for problem solutions are being sought, the degree of interaction and feeling of participation are somewhat greater. Similarly, the feeling of participation is greater when surveys are done by contact with respondents over a period of time to measure changes in attitudes and opinions, particularly if results of previous surveys are shared with respondents.

A survey very often serves to heighten citizen interest in the subject under consideration. Someone who had given the matter little thought previously might be stimulated by his respondent role in a survey, or attending a hearing to speak out more vociferously. This consciousness-raising is a subtle and often ignored part of the survey process. It behooves the survey designer to consider this to make sure that the feelings and ideas left behind with the respondent are appropriate.

The analysis of the results of a survey provides a greater opportunity for resolution of issues. As citizen opinions are explored and considered, policy formation has a greater chance of reflecting the public interest more accurately. Feedback of survey results and subsequent policy formation to the public provides a good mechanism for persuading the public that their interests and concerns have been heard.

Positive Features of the Survey Process

The advantages of a survey center on its ability to reach out to a large number of people and collect their attitudes and opinions on a variety of subjects. The biggest advantage to a properly designed survey is its ability to be representative of the whole population.

Respondents are frequently willing to express themselves in an anonymous interview when they would be unable or unwilling to express themselves in a more public fashion, such as a group meeting or hearing. Thus, contact is made with the "silent majority." In an interview situation it is also possible to collect a greater amount of detail than is possible in a public forum. It is also a good way to monitor changes in attitudes and opinions which respondents might otherwise be unwilling to admit.

In most instances, surveys are highly cost-effective in terms of yielding a great deal of information for their costs .

Negative Features of the Survey Process

Despite the enthusiasm of those familiar with surveys, there are some features which might be considered as drawbacks to a survey.

- Respondents may not be willing to participate because the survey calls upon some who may be indifferent to the subject matter. Persuasion may be necessary.

- Only superficial or socially acceptable answers may be given unless every effort is made to convey the seriousness of the survey and its desire to "hear it like it is."

- Respondents may not know the answers being sought.

- Its non-interactive nature limits the generation of and response to new ideas.

- Its ability to involve citizens in real and continuous participation in planning is limited.

- It risks the chance of raising false expectations among participants--"Now that I've had my say, they'll change their plan and do it my way!"--at the extreme, and expectation of action at the least.

Costs Involved

The cost of a survey depends on the following factors:

- Degrees of difficulty in developing survey design
- Size of the sample
- Type of sample (probability vs. non-probability)
- Type of interviews, mail, telephone, or personal
- Degree of interviewer skill necessary (executive interviewers are most costly; student interviewers least costly)
- Amount of interviewer training necessary
- Length of interview
- Location of interview (ghetto, suburb, etc.)
- Time of day (day, evening, etc.)
- Type of respondent (executive, housewives, blue collar, etc.)
- Follow-up of non-response
- Expenses for coding and editing (increases with amount, type and complexity of interviews)!
- Amount of computer analysis or other form of tabulation
- Length and type of report desired
- Miscellaneous factors - (delays due to snowstorms, vacation, etc.)

Obviously, the most expensive type of survey is the large sample survey administered through personal in-depth interviews conducted in the evening in all parts of a large metropolitan area. Conversely, a short mail questionnaire can be completed at a much lower cost.

Without including costs for editing and analysis estimated costs are: $1.00 per mailed questionnaire, $5-10.00 per landed telephone interview, and $10-20.00 per landed personal interview. Cost estimates for a 20 minute interview including coding punching, and basic analysis per completed interview are: $3-5.00 for mailed questionnaires, $10-15.00 for telephone interviews, and $15-30.00 for personal interviews. (These are 1975 costs.)

Program Utilization

Surveys have been the mainstay of commercial market research for decades. They have been increasingly utilized in the public sector as well. Transportation planners have long used the original destination-type survey and have more recently used attitude surveys. The survey technique has been used in the private sector, in commercial transportation studies, in public sector studies in transportation, health, education, urban planning, and other social service studies.

TASK FORCE

Description and Function

A Task Force is an ad hoc citizen committee in which the parties-at-interest are actively engaged in a well-defined problem-solving or specific task effort in the planning process.

Created by the sponsoring agency, the Task Force may be part of a larger, ongoing participatory structure, such as an advisory committee or planning council, or it may be a single independent effort. The purpose of the Task Force is limited to a specific problem or task objective in the planning process. Therefore, it is a temporary structure whose function and existence generally terminates with the accomplishment of the task or solution of the problem.

The directed purpose of the Task Force necessitates a membership sufficiently limited in number to allow all members to participate actively and effectively. A membership of from eight to 20 participants is characteristic. Task force members may be selected and appointed by the planning agency or self-selected by interest groups identified by the agency and then formally appointed by the agency. In some transportation planning exercises, potential task force members have been self-identified, subject to ratification by the affected interests to provide a wide spectrum of citizens' views on the issues at stake.

Generally, task force members tend to be fairly equal in status and responsibility, except for the chairman who occupies a key and pivotal role in promoting interaction among members between and during meetings, directing the progress of the Task Force, and coordinating its efforts. Members of the Task Force generally are not equal with the agency's professionals in either expertise or knowledge. The Task Force relies on agency staff for technical assistance and support. The agency may augment its own technical expertise by engaging outside experts to assist the Task Force in its efforts, either on a one-time basis to present testimony or on an ongoing basis.

Positive Features

The Task Force represents an opportunity for enlisting citizen input in the planning process. With its focus on a specific task or problem, the time and effort of the members can be effectively channeled to come to grips with the issues at hand. The limited size of the Task Force encourages communication and interaction among members and between the Task Force and the staff of the planning agency, enhancing the capacity of the Task Force to deal with complex problems. The diversity of its membership presents different points-of-view and brings different interests to bear on the issues. In the process, citizens learn from each other and from the staff.

The Task Force can generate wider citizen participation through its individual members involving their own constituencies in meetings to discuss the issues. The Task Force can also undertake a variety of jobs (data-gathering and analysis, etc.) essential to the planning process, releasing agency staff to devote more time to the technical aspects of the process.

Since the task is well-defined, limited in time, and membership is small, Task Force members can have an active role, and so are willing to make a commitment of their time and energies, promoting consistency in attendance. Participation in the Task Force is generally satisfying for the members, and their experience reflects positively on the agency.

Negative Features

The goals of a limited membership and representation from all affected interests are frequently in conflict, and one or the other may be sacrificed at a cost of efficiency and effectiveness. Lack of parity in technical expertise between the Task Force members and the agency professionals tends to limit the initiative of the members and may inhibit them from challenging the assumptions and values of the agency.

The sponsoring agency must make a considerable investment of staff time for orientation of the members to the task at hand, and for preparation of materials and information to them. In the process, Task Force members may be manipulated and coopted, either consciously or unconsciously, by the agency professionals to the extent that the members identify more with the agency than with the interests they represent.

When the Task Force is independent of any other citizen planning structure, it has little or no accountability to a larger public. As part of a larger structure, its independence to issue its reports and recommendations is limited.

The power and authority of the Task Force is limited to advice and recommendations on specific problems or tasks; thus, without special efforts, Task Forces can deny the citizens the opportunity to gain a broader perspective or to be involved in the full planning process.

Potential for Resolving Issues

The limited size and diverse membership of the Task Force encourage intense discussion and interaction, creating opportunities for trade-offs, negotiation, change in perspective, and compromise. It is an excellent technique for consensus-building if the agency staff is skilled in managing groups and is receptive to citizen inputs.

Program Utilization

The Task Force is a popular organizational structure, widely used in Federal programs at all levels of government. HEW has utilized Task Forces for such specialized assigments such as preparation for the White House Conferences on the Aging. HUD has established Task Forces for specific problem areas, as have many regional planning agencies and most Model Cities programs. The Task Force structure has been used by the New York State Department of Transportation in corridor planning, as has the Puget Sound Governmental Conference in its 1969 land-use study.

Procedures

Step (1) Identify community groups and key leaders of those groups. Notify these groups and key individuals that a project is being considered and that their participation is needed.

Step (2) Identify tasks which are to be completed by the community through task forces. The community can be utilized in completing specific tasks such as:
- (a) identifying community problems arising from a constructed project
- (b) identifying and developing project alternatives
- (c) evaluating selected alternatives
- (d) predicting social and environmental impacts of a project
- (e) motivating community citizens to participate when needed.

Determine the size of each of the task forces needed to complete these tasks. Task forces should remain small to be effective and the degree of community involvement depends upon the technical skills and educational effort required for task completion.

Step (3) Through one of the following two alternatives form a task force.
- (a) Allow CI team to select interested community members. Selection should be made at neighborhood level meetings and selected individuals should be chosen only if they possess the skills necessary for task completion.
- (b) Allow various community groups to elect participants to the task force. However, this step eliminates community individuals not affiliated with any of these groups. In addition, task forces usually either include agency personnel or are staffed by the agency.

Step (4) Inform the task force of precise duties and obligations. This "orientation period" should provide an atmosphere where task members become acquainted with one another and where project background information (technical) is provided.

Step (5) Once the task team is identified and orientation period completed, a manager (chairman) must be either selected or elected as described in Step 3 above. The manager should be someone with stature in the community who has the trust and credibility of all task force members. He must be able to communicate with many interest groups and have the managerial talent to see through the completion of complex tasks.

Step (6) Once underway, the task force should be charged with some responsibility of catalyzing more extensive community participation. This might be accomplished by allowing citizens to comment upon "issue papers" which outline some of the issues confronting the task force. These papers should be prepared from several points of view so that citizens receive a balanced perspective.

Costs Involved

Costs are relatively inexpensive, involving professional staff to provide the technical assistance and support for the Task Force, clerical support, and reproduction of materials, including the Task Force's final report. When other participatory techniques, such as visual displays, models and computer-assisted methods, are employed to assist the Task Force in its deliberations, costs increase.

Endnotes

[1] This chapter, with minor adaptations, is from A. D. Little, Inc., Effective Citizen Participation in Transportation Planning. Washington, D. C.: U.S. DOT, FHWA, 1976.

[2] See, for example, Robinson, John P. and Shauer, Phillip K., Measures of Social Psychological Attitude (Ann Arbor: Survey Research Center University of Michigan, 1969), Also Selltiz, C., Jahoda, M., Deutsch, M. and Cook, S., Research Methods in Social Relations (New York: Holt, Rinehart and Winston, 1951, 1959), pp. 243-55, 279-314, and 343-384.

[3] For a discussion of the theory of random sampling, refer to Cochran, W. G., Sampling Techniques (New York: Wiley, 1963) or Deming, W. E., Some Theory of Sampling (New York: Wiley, 1950).

[4] This is based on the assumption that there is an equal probability of choosing any answer and the coefficient of variation is 10 percent.

[5] For a discussion of theory, see Ostle, Barnard, Statistics in Research (Ames, Iowa: Iowa State College Press, 1956).

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CHAPTER 14. STRATEGY FORMULATION AND TESTING

The development of a program of action has usually proven to be a topic of considerable public interest, more so than most other aspects of the planning process. As a consequence a large number of good devices for involving both agencies and the public in this stage have been created. Many now have seen many decades of use.

In this chapter, three of these techniques have been selected for presentation. Two of them -- Citizen Advisory Committee and Public Hearing -- are among the oldest participatory devices. Both are basically reactive in character. In contrast Fishbowl Planning is one of the newest techniques. It allows the parties-at-interest much more initiative and a much more active role than is generally possible with the two older devises.

Elsewhere in Part IV can be found a number of other techniques which have demonstrated their usefulness for strategy formulation and testing. Twice as many of these are of the "inform and get reactions" school of involvement, but these are also a number of "initiative" planning techniques.

Among the reactive techniques discussed elsewhere are Public Information (Chapter 17), Hotline (Chapter 17) and Neighborhood and Open Information Meetings (Chapters 16 and 17 respectively). The more active initiative techniques covered are Policy Delphi (Chapter 12), Task Force (Chapter 13), Advocacy Planning (Chapter 16), Technical Assistance (Chapter 16), Coordinator/Catalyst (Chapter 15), Neighborhood Planning Council (Chapter 16) and Workshops (Chapter 10).

CITIZENS' ADVISORY COMMITTEE

Description and Function

A Citizens' Advisory Committee is a group of citizens called together by an agency to represent the ideas and attitudes of their community in advising and giving consultation to the agency. A popular participatory structure, the Citizens' Advisory Committee came into wide use in response to the mandate for citizen participation in such Federal programs as the HUD Workable Program for Community Improvement and Urban Renewal.

Citizens' Advisory Committee is a generic term, covering a variety of committees or councils, different in type, membership, and operations, according to the purpose and function of the agency. Generally, however, most Citizens' Advisory Committees have the following characteristics:

- Limited power and authority. The purposes of the committee are usually broadly stated, in terms of giving advice and consultation to the agency. The committee tends to operate from a general acceptance on the agency's goals, bringing its ideas and influence to bear on the decision-making process by reacting to the agency's proposals.

- Large membership. Advisory Committees may range in size from 50 to 100 members. In order to accomplish the assignment, therefore, committees frequently organize themselves along functional lines into subcommittees or task forces.

- Agency staff provide the technical assistance and support for the committee. The agency may call in or employ other professionals to assist in this task or to provide expert testimony to the committee.

- Structural life of the committee is tied to the life of the program or project, though membership on the committee may change, either voluntarily or through stated procedures.

- Meetings of the full committee tend to be infrequent.

Membership on the committee is usually designed to reflect broad community interest groups and may include representation from both affected and unaffected interests, including those disposed toward the agency, as well as those in opposition. Community leaders and influential persons are almost always included among the members and, to the extent that they are predominant, the group may be described as a "blue-ribbon" committee. Membership on advisory committees frequently includes citizens who are selected on the basis of their professional knowledge and expertise, but who generally serve in their role as citizens, as opposed to their professional role. Officials of other public agencies may also be included as members, representing the interests of their agencies. Members may be chosen by any one of the following methods:

- Appointment or invitation by the sponsoring agency.

- Self-selected representation by particular interest groups, identified by the agency.

- Popular election, usually under procedures established and/or approved by the agency. This method is a fairly recent innovation which developed in some urban renewal programs in response to community charges that agency-selected membership failed to reflect representation of contending interests.

- Combination of the above.

Positive Features

The Citizens' Advisory Committee provides the public agency with a community listening post, offering feedback on proposed program approaches and plans. As representatives of a larger constituency, the committee can articulate and interpret the goals of the agency to the general public. With adequate staff assistance, the committee can deal with technical issues and, in the process of reviewing proposals, suggest and initiate alternatives. If assigned specific tasks and given staff direction, the committee can augment the work of the staff, such as assisting in surveys and gathering data. Individual members of the committee have the opportunity to become familiar with the broad issues and concerns of the agency, as well as its processes and goals.

Negative Features

Participation in a Citizens' Advisory Committee is a time-consuming and frequently frustrating experience for citizens. The large membership brings together citizens who may be unequal in status, knowledge and experience. In this situation, less informed members are reluctant to participate actively, lest they reveal their weakness. Inequality of status and expertise between the committee as a whole and the agency professionals inhibits members from raising issues and challenging the value and data bases of the agency's proposals. Without technical assistance, the committee cannot deal adequately with issues, and members frequently feel that they only "rubber-stamp" the agency's decisions.

For their part, agency professionals may tend to devalue the committee's capacity to deal with technical aspects of planning and withhold or present insufficient information. Some officials complain that providing sufficient staff support and assistance to the committee diverts the time and energies of the agency staff.

Frequent charges against Citizens' Advisory Committees are that, except for a popularly elected membership, they are rarely representative, have little or no accountability to a larger public, and are used by the public agency as a means of coopting citizens, placating community interests, and circumventing community opinions. When advisory committees are the only technique used by the agency, they can become a critical barrier to citizen input from population sectors which are not represented on the committee.

Potential For Resolving Issues

A Citizens' Advisory Committee offers only a limited potential for resolving issues, since it tends to reflect the agency's goals. Particularly when membership is agency-selected, differences of opinion are unlikely to be raised. Where membership is self-selected by identified interest groups or elected by popular vote, the potential for negotiation and persuasion increases. An adequately staffed advisory committee has more potential for raising and resolving issues.

Program Utilization

The Citizens' Advisory Committee is widely used at local, State and national levels for many Federal programs. Local urban renewal, Model Cities, and Headstart programs employ Citizens' Advisory Committees, State and regional committees have been appointed for water resource planning, airport planning, and regional planning. On the national level, Federal agencies have appointed such committees as Advisory Committees on Civil Rights, on Soil and Water Conservation, on Environmental Quality, and Consumer Product Safety.

Procedures

Step (1) Community Advisory Committees should not represent the sole source for determining community values. Therefore, an agency should determine community values through techniques including field work methods, listening posts, issue ballots, or surveying community members by questionnaire or personal interview.

Step (2) Community advisory committees can be established in one of several ways. Under certain political situations (when the local authority will not allow the agency to establish the advisory committee), it may become necessary for the mayor or city council to appoint members to the advisory committee. This should be avoided when possible, however, since such committees do not tend to be representative of the various publics. Identify key people and inventory affected groups. Interview key people and obtain their attitudes towards the development of a community advisory committee. Ask for names of people who are community and group leaders.

Step (3) From this list of names and from the identified key people, establish a "blue ribbon" committee which will oversee the functioning of the committee and who will begin the committee's activities.

Step (4) Conduct an orientation meeting with the "blue ribbon" committee which outlines the powers and duties of the committee, the life of the committee, and the procedures of committee meetings.

(a) Powers and Duties - The committee will give advise and consultation to the agency. Because the committee size will be large, the "blue ribbon" committee can break the committee down into task force groups. The committee should be responsible for gathering relevant community impact data, for reviewing and reacting to community plans, for distributing information on meetings and events, and for devising alternatives for the agency.

(b) Committee life should be limited to the life of a project.

(c) Meetings of the total advisory committee, if large, should be held infrequently (once per tri-mester). However, the steering committee (or "blue ribbon" committee) should be responsible for maintaining contact with committee members and for keeping track of task progress.

Step (5) With the aid of the "blue ribbon" committee, ask community members and individuals to nominate people who they wish to represent them on the committee. The total committee number can range from 50 to 100 people depending upon the resources available to the agency for the operation of advisory committees. Final selection of committee members should be made by the "blue ribbon" committee and the agency jointly.

Step (6) The agency is responsible for providing technical and clerical assistance to the committee so that it can carry out its purpose. Therefore, the agency should keep abreast of the committee's needs and progress by maintaining regular and frequent contact with the committee.

Costs Involved

Maximizing the potential of the Citizens' Advisory Committee requires an investment of agency resources--administrative and staff time, plus clerical support. Costs also include preparation and reproduction of materials for committee members, mailings, and publication of the committee reports. Estimated costs range from \$20,000 - \$60,000, depending on the level of staff resources made available.

FISHBOWL PLANNING

Description and Function

Fishbowl Planning is a relatively new method of involving citizens in a planning process. The technique was developed by Colonel Howard Sargent as a management planning process for work at the Department of Defense, and later introduced by him into the Army Corps of Engineers for water resources planning. The term "fishbowl" is used to denote an open planning process in which all parties-at-interest can express their support or opposition to an alternative before it has been adopted, thereby affecting or restructuring the plan to the point where it is acceptable to them.

In Fishbowl Planning, alternatives to a particular project are identified and described by the planner in a series of Public Brochures. Interested groups and individuals indicate why they are for or against each brochure, which is circulated to all parties-at-interest. The alternatives are then restructured, and, in the end, the proposed project can be redefined in terms of enhancing positive impacts and reducing negative impacts to various parties-at-interest. The process allows the planner to understand and, theoretically, discard the most controversial aspects of a plan; it also allows the general public to react, redefine, understand, and, if successful, support the final outcome.

There are four main components in Fishbowl Planning:

- Public Meetings. Public meetings are called at the beginning and throughout the planning process. They are open to everyone. Individuals, agencies, and groups present their thoughts, discuss proposed alternatives, and register their support or opposition to the alternatives.

- Public Brochures. Before each public meeting, agencies, organizations, and individuals interested in the proposed project put down in writing the alternatives they wish to have considered, and indicate the pros and cons that each alternative presents. These alternatives are then reduced to a two-page written statement and printed in a brochure. The left-hand side of the brochure describes the alternatives, while the right-hand side lists the pros and cons of each alternative. For every alternative, there is also a "no action" alternative. Rebuttal space is provided in the columns across from each pro and con. Each statement is signed by the individual or organization that registers its approval or disapproval.

The sponsor provides technical assistance to citizens in drafting their own alternatives. The brochure provides the opportunity for each party to clearly express itself in writing, identify itself, and explain its particular preference. The brochure is written and distributed before each meeting, so that all the actors and their positions (including changed positions) are identified.

- Workshops. Participants are invited to a workshop to discuss alternatives. These alternatives are used as input for the next brochure. Workshops are limited in their size, usually small groups under 30, and in the number of alternatives they consider. Sponsors are present to record the issues raised.

- Citizens' Committees. CITCOMS are self-selected groups, which consist of representatives from various formal interest groups and local government agencies, who get together to suggest additional alternatives and to recruit citizen discussion leaders. These discussion leaders are selected to define a specific alternative in a public meeting or in a workshop. CITCOMS also work to pass on study information to interested groups, and are given administrative assistance by the sponsor or the initiator of the project.

These four components are used several times throughout the course of the planning process in a sequential series. Typically, the process calls for four public meetings, seven brochures, three workshops, and as many

CITCOMS as may be necessary. The sequence usually begins with a general public meeting, followed by a brochure, a workshop, and a citizens' committee meeting.

Positive Features

Advocates of Fishbowl Planning note that the process allows the general public, special interest groups, and public agencies to become involved in the planning process from its beginning. Each party is given the opportunity to present views in writing and to register support or opposition to other views. Each party-at-interest is identified. Participants come to public meetings knowing the alternatives under consideration, knowing where others stand, and sharing information. Each participant shares in the process, and there are no priorities granted to one group or individual over another. Participants receive constant feedback on where others stand, and can observe and affect how the issues and priorities change. The process of iteration that takes place allows the participants to screen out those alternatives that are unacceptable.

From the planner's point-of-view, all information is shared equally, and public opposition and support alert him to the most acceptable alternatives for the project. The public reacts to substantive issues, and much of the emotionalism surrounding the process is therefore dissipated. The planner can receive all this information before an alternative is selected and if the process is successful, can therefore expect to have a broad consensus at the time of implementation.

Negative Features

Critics of Fishbowl Planning argue that the public is presented with a limited amount of information to begin with and that the information has already been preselected by the sponsoring agency and is therefore limited, biased, and predisposed toward the sponsor's project. They argue that the public is not given all the necessary information, particularly the major analytical assumptions used to determine feasibility of alternatives and the political decision-making affecting the planning process. Critics also report that the problem has been defined by the agency and that the public is only asked to respond to the agency's perception of the problem rather than define the problem from a broader standpoint. Another concern is that the public's choice of reacting to an alternative is limited by the need to respond pro or con and that there should be a mechanism for registering general comments on an alternative as well. In addition, the format of the Public Brochure is criticized as a rigid, technical, bureaucratic document which should be written in lay language.

Some organized citizen groups have complained that they are more informed on the issues than the general public, and therefore resent the fact that their more knowledgeable inputs carry no greater weight. There is the common complaint that only the well-established citizens' groups are informed of the projects (through the initial mass mailing) and that this method excludes other equally important although less readily identifiable, groups.

Potential For Resolving Issues

While critics have argued about the limitations of Fishbowl Planning as it has been practiced in its developmental stages, evaluation findings suggest that if improvements are made in carrying out the process, it has high potential for raising and resolving issues, since it provides the framework for identifying parties-at-interest, engaging them in analysis of issues and alternatives, and enabling changes in perspectives, as well as modification of alternatives selected.

Procedure

This particular technique should not be confused with the group dynamics technique -- both techniques are termed "fish bowl" and both techniques have similar interactive characteristics. However, the technique described below is designed to accomodate an entire community while the group dynamics technique is applicable to small (less than 15 people) groups.

Step (1) Before deciding upon utilizing fishbowl planning, the agency should have developed a preliminary set of project or C.I. program alternatives. The process depends upon initially reacting to and restructuring a given set of alternatives. Other alternatives, however, can also be introduced at any time in the process.

Step (2) Adequately inform the public of the proposed fishbowl planning program (Major Group Objective IV). Included in the information that the public receives is:

- (a) the general elements of fishbowl planning,
- (b) the place and time for the first general meeting,
- (c) who to contact in case of questions, and
- (d) encouragement for all interested parties to participate.

Step (3) Develop a brochure which outlines the agency developed alternatives. On the brochure the pros and cons of each alternative should be described and presented in the following 2-page format:

> "The left-hand side of the brochure describes the alternatives, while the right-hand side lists the pros and cons of each alternative. For every alternative, there is also a "no action" alternative. Rebuttal space is provided in the columns across from each pro and con. Each statement is signed by the individual or organization that registers its approval or disapproval." (Little, Inc., p. 89)

This same format will be used on each brochure that is sent out. A brochure will be sent out prior to and after each meeting and workshop.

Step (4) Conduct a formal public meeting (Technique I/A and Appendix 1) to explain the process to potential participants in more detail. Present the first alternatives to participants in the form of a brochure (established in Step 3) and ask people to respond to these alternatives on the brochure. Before the meeting ends ask participants to fill out a mailing card if they wish to participate so that they can receive subsequent and necessary information by mail.

Step (5) Evaluate the responses received at the meeting and from the first brochure. Structure as many of the comments into the alternatives as is possible. Develop, then, a second brochure which outlines the new restructured alternatives in the same format as is described in Step (3). Send these brochures to participants of the meeting and instruct them to respond to the restructured alternatives prior to a workshop to be held in Step (6).

Step (6) Through direct mail invite participants to a workshop (Technique III/D) where developed alternatives will be discussed by a small group (under 30). Have each participant bring the second brochure to the meeting so that written responses can be discussed at the workshop and tallied by the agency. If there is a large number of participants (over 50), several workshops may have to be conducted to accomodate all participants.

Step (7) Re-analyze written responses and produce a third brochure to be sent out to participants. Also inform the total community that another public meeting will be held which is open to all.

Step (8) Repeat Steps 4, 5, and 6 until three general meetings and three workshops have been conducted. Brochures should be sent out before and after each workshop and meeting.

Step (9) Throughout the process support the activities of any citizen committees (CITCOMS) which develop. Citizen committees consist of self-appointed representatives of certain interest groups who meet with local officials. The CITCOM selects discussion leaders who present one alternative to the participating group at either meetings or workshops. This discussion leader should have some expert knowledge about the alternative he/she is presenting to the group. CITCOMS occur whenever necessary and may be financed by the agency.

Step (10) Conclude the fishbowl process with a formal pbulic meeting. Hopefully, by this time due to the number of iterations in the whole process, one alternative will emerge and be supported by those who have participated.

Program Utilization

To date, Fishbowl Planning in the public sector has been pioneered by the U.S. Army Corps of Engineers, most notably in its Snohomish River Basin Study, the Snoqualmil River Joint Study, Nooksack River Basin Study, and Flathead River Levee.

Costs Involved

Fishbowl Planning is a relatively expensive process which involves a large number of actors and has a large number of steps. The sponsor must assign technical staff to work throughout the process with several meetings, workshops, and CITCOMS. In addition, there are dollar outlays for the production, distribution, and revision of the Public Brochures. Rough Cost estimates range from 10 percent to 20 percent of a total study cost.

PUBLIC HEARINGS

Description and Function

Public Hearings probably have the longest history of any participatory method, since they have been required in governmental decision-making at all levels for many years. A Public Hearing is usually required when some major public policy, program, or project is about to be implemented, or prior to legislative action on such public issues as zoning matters. A recent study of participatory approaches used in transportation in ten foreign countries reveals that the Public Hearing (and associated grievance procedures) is the primary technique used.

As legally required procedures, most Public Hearings are characterized by procedural formalities which include an agency hearing officer and an official transcript of the proceedings. Characteristically, the hearing agency presents its proposal or plan, followed by testimony of individuals recognized by the hearing officer. The hearings are generally open for any individual or representative of a citizens' group to present views for the official record.

Positive Features

Hearings are basically designed to let everyone be officially heard before final decisions are reached. A legally required hearing assures citizens of the opportunity to be heard and the opportunity to challenge the actions of the public agency at the hearing itself. When citizens are well-prepared for the hearing through prior exposure and discussion of the issues, their presentation can be forceful and persuasive. When the hearing is held at the end of a technical planning process that has utilized other participatory techniques, it can provide an official record that is useful in decision-making.

Negative Features

Public Hearings offer only limited one-way communication. Citizens present their views as formal testimony but cannot interact with the agency representatives, thus more heat than light is generated. When insufficient information is available prior to the hearing, citizens tend to express uninformed views or tend to present their views in terms of narrow, specific interests. Depending on the issue (highway projects usually rank very high in terms of controversy), there are usually a relatively large number of speakers, characterized largely by adversely affected citizens who are hostile to the project. The emotionalism that is usually generated at a Public Hearing can lead the agency decision-makers to discount the testimony because it was irrational and confused. Hearings also can be counterproductive if the agency uses them for "official purposes only" and the citizens have a tendency to feel that the decisions have been already made and that the hearing is a method to achieve ratification of the results.

Potential For Resolving Issues

Because Public Hearings do not allow for interaction, they are more useful in summarizing positions on issues then they are for changing perceptions or resolving the issues themselves. They are useful to give decision-makers an understanding of how various citizens feel about a specific project prior to the time when the decisions are to be made, and they are best utilized in conjunction with other participatory techniques which make it possible to hold surprise-fee hearings which serve to ratify agreements previously reached with parties-at-interest.

Program Utilization

Most public works projects, and most important planning decisions (such as local zoning changes), made by local government agencies require Public Hearings of one sort or another. In most instances, the hearings are legally prescribed and required. 23 CFR 790 (FHPM 7-7-5) is the official guideline for Public Hearings required for highway projects funded under the Federal highway acts. State highway agencies and local planning agencies also operate under similar regulations and guidelines.

Procedures

Because formal Public Hearings or meetings can be used appropriately and effectively at several stages of policy planning and implementation, a more detailed outline of a public meeting procedure is given in Appendix I. The following steps represent a general guideline for effective utilization of public meetings:

Step (1) Develop an organization strategy which consists of:

- (a) An established public meeting unit responsible only for the planning of public meetings.
- (b) A public relations program which concentrates on encouraging citizen response and developing agency credibility.

Step (2) Develop a pre-meeting strategy. Specifically, a general pre-meeting process should:

- (a) Determine a time for the meeting which will be convenient for most community members. As a general rule schedule meetings on weekday nights or on Saturdays.
- (b) Adequately inform the various publics of the meeting's subject, date and intent 30-90 days before the meeting takes place.
- (c) Provide for assignment of specific tasks to specific people (securing of place, handing out brochures, contacting media sources, etc.).
- (d) Develop a meeting preparation checklist which outlines when and by whom certain pre-meeting tasks are performed.
- (e) Schedule a dry run of the meeting.
- (f) Decide upon who will speak and about what and who will be available as resource (back-up) people. Agency staff with various technical backgrounds and points of view should be present to insure that most questions are answered.

Step (3) The following are general guidelines when conducting a meeting:

- (a) Arrive early for meeting to facilitate informal discussion with community members.
- (b) Keep statements short, and in laymans terms so that interest may be held.
- (c) Maintain semi-formal structure by encouraging citizen response and by allowing individual coffee breaks.

(d) Use simple but sufficient visual aids to clarify concepts.

(e) Unobtrusively record audience reaction either through video tape (with prior approval of individuals) or through an experienced minutes taker.

(f) Decide at meeting's end if and when another meeting should be held. Ask participants how attendance of meeting might be increased.

Step (4) Remain present following the meeting to answer questions. Follow up the meeting by sending letters to community participants especially those who have specific questions. This provides for greater chance of their future participation.

Costs Involved

Costs include staff (hearing officer, technicians, stenographer), public notices in newspapers, mailed notification to interested parties, meeting place, and publication of the official transcript, and might range between $500 and $25,000, depending on complexity.

ENDNOTES

1. This chapter draws heavily on A. D. Little, Inc., Effective Citizen Participation in Transportation Planning (Washington, D.C.: U.S. Federal Highway Administration, 1976). The debt is gratefully acknowledged.

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CHAPTER 15. EVALUATION AND CONFLICT MANAGEMENT[1]

"Evaluation" is a term that in its narrowest sense refers to the step in the planning process, after all the facts about all the impacts of all the alternatives are in, the decision-maker and his advisors must determine the relative weight (or value) to be placed on each impact. This is the point at which value conflicts between parties-at-interest are likely to be most intense. Hence, it is natural to link evaluation and conflict management.

As a practical matter, however, unless the ground work has been laid early in the process through good participation, it is unlikely that conflict resolution efforts will succeed. Even the most popular conflict resolution techniques, Arbitrative/Mediative Planning, is dependent on the groundwork of earlier stages.

One of the newer conflict management techniques, designed to provide the essential continuity, is the coordinator/catalyst. The person in this role may make extensive use of arbitration and mediation procedures, but is likely to do so in a more open manner.

Attention should also be given to the conflict management potential of such techniques as Task Force (Chapter 13) and Policy Delphi (Chapter 12). The Hotline (Chapter 17) has the potential of providing early indications of conflict, sometimes thereby permiting the issues to be defused. A similar function is served by monitoring meetings of all kinds, media stories and letters, and the use of Workshops (Chapter 10) and Attitude Surveys (Chapter 13).

ARBITRATIVE AND MEDIATIVE PLANNING

Description and Function

Arbitrative and Mediative Planning are techniques which enable the various parties-at-interest to a planning process to rely on an independent party to resolve the issues raised by the contending parties. Both are standard techniques used in labor/management disputes and international relations. The conflict resolution skills employed in the two techniques are essentially the same, but the central difference between them is that the disputants agree to accept the decisions of the arbitrator, while the disputants only empower the mediator to act as a "go-between-and-among" by proposing recommendations. Frequently, when mediation fails to resolve the issue, the disputants agree to settle the issue by abiding by the final decision of the independent arbitrator.

The arbitrator or mediator could perform the arbitration-mediation role during various stages of the planning process, or could be brought in to resolve issues at the final stage of the planning process after the issues have been crystallized. If utilized during the course of the planning process, the arbitrator or mediator might be selected at the outset and be involved at various milestones, for example, developing objectives, establishing needs and goals of each party-at-interest, crystallization of study alternatives, impact analysis, etc. After hearing the various points-of-view presented by the contending parties, the mediator could either use his diplomatic skills to help the parties-at-interest reach an agreement among themselves, or recommend appropriate changes. Alternatively, in complex or high conflict issues, the arbitrator could be authorized to make the decision if the parties-at-interest agree to abide by it. Case studies show that mediation must be a highly skilled person.

Positive Features

By introducing an independent arbitrator or mediator into the planning process, the manager or planner is not placed in a position of having to take sides with any of the contending parties-at-interest. Once the parties-at-interest have agreed to the selection of an arbitrator or mediator, who is a non-stake-holder, the planning process can proceed with increased credibility and trust. The trust emerges from the assurance that all parties-at-interest will have an opportunity to articulate their views, that all views will be seriously considered, and that the decisions will be fair and equitable, since the arbitrator-mediator is not a stake-holder and has been selected for his credibility among all the parties-at-interest.

The skills of the arbitrator or mediator assure that both assumptions and facts presented by the various parties-at-interest are brought out into the open where they can be challenged and discussed. The technique offers an additional advantage in a community where the issues of trust and distrust between the citizens and the agency are critical. Since the agency has delegated its conciliation powers to the arbitrator-mediator the various parties-at-interest will not use back-door processes to press their point-of-view with the agency. (See the Coordinator-Catalyst technique for a description of the conciliation role frequently played by planners.)

Negative Features

Since such a technique is most likely to be used in a community where there is a high level of distrust of the transportation agency and deeply conflicting points-of-view among the parties-at-interest in the community, the process of selecting an arbitrator-mediator will be quite time-consuming and may delay the onset of the study process. All potential parties-at-interest need to be involved in the decision to use an arbitrative or mediative planning approach, in understanding its ground rules, and in selecting an individual who has credibility and is perceived to be fair.

The technique is relatively expensive, since in addition to the arbitrator/mediator's fee those parties-at-interest with limited or no resources will probably need technical assistance in developing and articulating their point-of-view. In addition, the arbitrator-mediator, who may be unfamiliar with the particular issues, will, of course, have to master some of the state-of-the-art problems in making recommendations or reaching decisions on issues of benefit and disbenefit to the various parties-at-interest, particularly those issues which are non-quantifiable or non-comparable. In public programs, it is frequently not legally possible to delegate the final decision to an arbitrator, since a status lodges the decision-making authority with a duly constituted decision-making body or individual.

Potential For Resolving Issues

Since the technique enhances trade-offs, compromise, negotiation, and change in perspective, the technique has good to excellent potential for resolving issues.

Program Utilization

Arbitration and mediation techniques have been utilized in labor management disputes, Model Cities programs, and environmental planning conflicts. Only recently have these techniques been applied to public planning conflicts. In August 1974, the American Arbitration Association began a mediative/fact-finding process involving some two dozen participants in the West Side Highway Project in New York City. Initiated at the end of the normal planning process (after hearings on the draft EIS), its purpose was to establish common ground among the adversaries which would allow development of a compromise alternative.

Mediation has been used to resolve environmental planning conflicts. In 1974, mediators were used to help resolve conflict over flood control, recreation and development in the Snoqualmie River Valley of Washington. Mediators assisted in the negotiation of an acceptable flood control program which has created a stalemate between residents, businesses, farmers, and environmentalists over the construction of a major dam.

Procedure For Mediation

Step (1) Determine the extent and composition of the conflict by clearly defining the problem and the issue that must be resolved. Probe the source of conflict. Determine whether or not these differing interest groups have historically had conflicts of interest. If it is determined that conflict is based on historical differences between various groups and that the policy simply provides an opportunity for these differing groups to fight, then the C.I. team can act as mediator or the third party. If this is done, however, the agency must be careful to monitor attitudes of interest groups towards agency intervention so that the community does not turn against the C.I. team (e.g., Does reaction to agency become more hostile as mediation progresses?).

Step (2) If the agency determines that conflict is centered on an agency endorsed proposal, then a third party should be brought in to facilitate the negotiations. When using an independent third party the C.I. team and groups at interest search for a person(s) who is in a position to effect an actual trade-off between two groups. The Third Party only suggests these trade-offs to each interest so that reactions to suggestion can be secured or modified in negotiation. In search for this third party the C.I. team must be aware of:

(a) Who can effect trade-offs. The chosen party must be one which does not have an interest in the conflict and one which is acceptable to all interest groups, and,

(b) By what means are trade-offs to be effected. The trade-offs made should be such that new interest groups do not become involved in the conflict.

Step (3) Third party trade-off negotiation can occur through two means:

(a) through formal public meeting where competing interests meet face to face, and

(b) through presentation of trade-offs to each interest group in separate meetings ("Kissinger Diplomacy")

Step 3(b) may take longer than Step 3(a), however, it may be necessary if groups are hostile towards one another. The mediating group should attempt to draw upon the positive aspects of all plans and make recommendations. The mediator can only suggest changes; he/she is not in a position to make a final decision as is an arbitrator.

Step (4) Interact and coordinate the above steps with elected officials so that they can help resolve conflict and so that community trust in them is not diminished.

Step (5) Through surveys, interviews with key leaders, or review of video taped meetings, the agency should monitor the reactions and acceptability of final resolutions or decisions. Repeat the negotiation process or choose another conflict resolution technique if it is needed.

Procedures For Arbitration

The basic procedures in selecting an arbitrator are basically the same as for those in selecting a mediator or third party. In fact the arbitrator performs the same function as a mediator except that as a hearing examiner, he/she is entrusted by the conflicting parties to make a final decision. Therefore, there are variations in negotiation format between the arbitrator and the mediator. All procedures other than the steps mentioned below are the same for the arbitrator as they are for the mediator, or third party, approach.

Step (1) After selecting an arbitrator, both sides will prepare to "present their cases" in a public hearing format (see techniques).

Step (2) The arbitrator is, in theory, an independent investigative officer charged with the responsibility of sorting facts from emotional and sentimental opinion according to the accepted standards of judicial practices. Alternative plans and proposals are presented to the arbitrator in a quasi-judicial framework at the formal meeting. Each interest group presents its case on evidence and attempts to question assumptions made in the development of other plans. The arbitrator can request that new data be collected to establish more facts, or offer avenues of compromise. In theory the arbitrator bases final decisions on fact.

Costs Involved

The major outlay for the arbitrative or mediative planning process would be the fee to an arbitrator or mediator -- $200-$250 per day, depending on the length of time and number of meetings involved. Costs of agency staff time spent preparing positions and in meetings could be absorbed in the normal planning budgets. Providing technical assistance to all of the parties-at-interest to help them develop their cases would increase such costs.

In the West Side Highway Project mediation, the citizens groups represented by the Community Planning Boards utilized their own consultants, funded by the State transportation agency. Nonetheless, the overall costs of both technical assistance and mediation amounted to less than 3 percent of the total planning budget.

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COORDINATOR OR COORDINATOR-CATALYST

Description and Function

In the context of the participatory aspects of transportation planning, a Coordinator or Coordinator-Catalyst refers to an individual (and support staff) assigned the responsibility for personally providing the focus for involving citizens in a planning process. Such a person might be (1) the manager of the entire program who assumes the primary role for the participatory aspects, or (2) a special assistant or deputy to the program manager or director who takes on full-time responsibility for citizen participation as an adjunct to the program manager's responsibilities, or (3) a private consultant selected to serve as an interface between the technical team and the community. In any case, the Coordinator-Catalyst is a visible, identifiable, and responsible official of the particular planning or program structure who can speak with authority about the planning process and make programmatic decisions either alone or in concert with other high-level staff.

Bishop, Oglesby and Willeke distinguish between a Coordinator and a Coordinator-Catalyst. The role of the Coordinator is to remain in contact with and receive feedback from various parties at interest; the role of the Coordinator-Catalyst is to encourage interaction among these parties at interest. (See diagram from Bishop et. al. on the following page.)

The Coordinator's or Coordinator-Catalyst's functions might include the following:

1. Contacting directly groups and individuals with an interest in the program and arranging for their participation.

2. Conducting the meetings and other features of the participatory process.

3. Synthesizing the views, attitudes and suggestions of the various parties at interest and incorporating them in to the technical processes, where appropriate.

4. Maintaining liaison with various elements of the decision-making structure and acting as a link in the communications between these officials and various parties-at-interest.

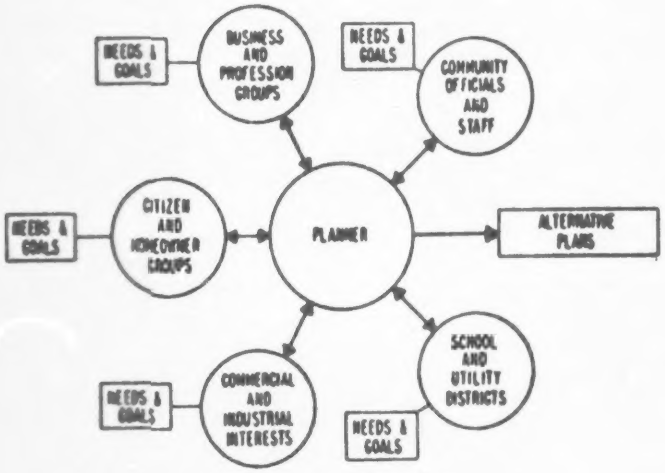
5. Arranging (in the case of Coordinator-Catalyst) for the parties-at-interest to interact with each other by creating the mechanism for interaction (e.g., workshops) and providing the needed technical expertise.

6. Maintaining a Hotline.

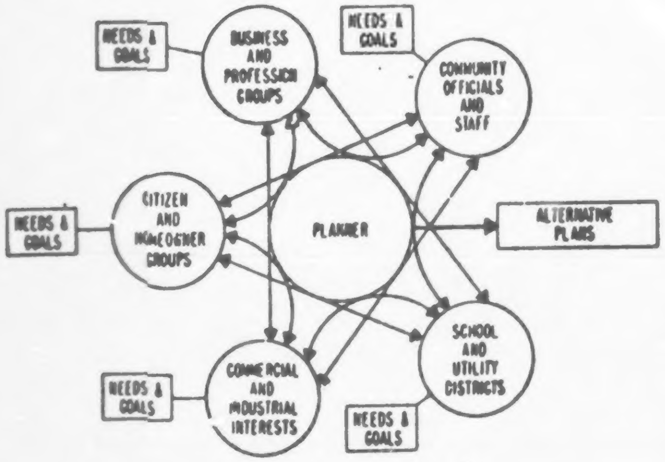
COORDINATOR OR COORDINATOR- CATALYST

FIGURE 1

COMPARISON OF THE ROLE OF COORDINATOR AND COORDINATOR-CATALYST


NEEDS & GOALS
BUSINESS AND PROFESSION GROUPS
NEEDS & GOALS
COMMUNITY OFFICIALS AND STAFF
NEEDS & GOALS
CITIZEN AND HOMEOWNER GROUPS
PLANNER
ALTERNATIVE PLANS
SCHOOL AND UTILITY DISTRICTS
NEEDS & GOALS
COMMERCIAL AND INDUSTRIAL INTERESTS
NEEDS & GOALS

The Coordinator


NEEDS & GOALS
BUSINESS AND PROFESSION GROUPS
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COMMUNITY OFFICIALS AND STAFF
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CITIZEN AND HOMEOWNER GROUPS
PLANNER
ALTERNATIVE PLANS
SCHOOL AND UTILITY DISTRICTS
NEEDS & GOALS
COMMERCIAL AND INDUSTRIAL INTERESTS
NEEDS & GOALS

The Coordinator-Catalyst

Source: Bishop, Bruce A., C. H. Oglesby and G. E. Willeke, Socio-economic and Community Factors in Planning Urban Freeways, Stanford, California: Stanford University Press, October 1969, p. 41.

Positive Features

A positive feature of a Coordinator as the focus of a participatory process is the concentration in one highly visible person of the responsibility for the participatory process. Once the Coordinator is identified, citizens know whom to contact and can look to the coordinator to acquaint them with all relevant information about the planning process and its relevant critical actors. The Coordinator can also communicate directly with appropriate officials, handle grievances, and otherwise insure that the process operates up to its expectations. The assumption of such a role on the part of a program manager or someone in authority close to the planning process is usually a sign that there is a strong commitment to citizen participation on the part of the agencies involved.

Negative Features

Much rests on the capability and integrity of one person in this kind of role. Particularly in a highly controversial program, it may be difficult to find an individual with the diplomatic skills, the technical knowledge, the credibility, and the personality to relate to a wide variety of different groups and interests, and to cope with the constant pressures such a role involves. The Coordinator places himself squarely in the cross-fire of conflict, and if he or she cannot speak with authority, he becomes useless for resolving issues.

Potential For Resolving Issues

If the Coordinator has established sufficient trust and confidence of the various parties-at-interest in the agency and in the community, the potential for resolving issues is increased. Much depends on the nature of the planning issues involved, the nature and interests of the participating groups, and power and position in the planning structure of the Coordinator-Catalyst.

Program Utilization

In Boston, there is a Special Office of the Southwest Corridor Coordinator who is responsible for handling both the technical and participatory aspects of a very complicated transportation project. The Coordinator is appointed by and is directly responsible to the Governor. Many federally-funded programs utilize the services of a Coordinator or Coordinator-Catalyst, e.g., water resources planning, regional planning, and transportation planning.

Procedure

Step (1) Determine the role and precise function of the coordinator/catalyst. Specifically determine if:

(a) he/she will have responsibility for designing and/or conducting the community involvement program,

(b) he/she should have a certain technical skill level (as well as C.I. skill level) so that the coordinator/catalyst can have the authority to make certain "on-the-spot" decisions, or

(c) he/she will act primarily as a consultant to both community and agency groups in community involvement affairs.

Depending on the precise role of the coordinator/catalyst, he/she might be responsible for the following duties:

(a) directly contacting community groups and insuring their participation,

(b) acting as a coordinator and/or speaker at public meetings,

(c) offering suggestions to community groups and acting in an advisory capacity,

(d) bringing diverse community ideas together to form a coordinated single idea which can be incorporated into the planning process,

(e) acting as a liaison, and

(f) arranging for different community groups to interact with one another through informal meetings, workshops, etc.

Step (2) Locate and hire a professional who is capable of performing the role and tasks as defined by the agency in Step (1).

Step (3) Make the chosen coordinator/catalyst visible to the community through announcements, meetings and news release (Major Group Objective IV). The person should be easily accessible to community residents and groups. Therefore, the agency should provide a central office and an adequate staff (clerical staff and supporting coordinators) to the coordinator/catalyst.

Costs Involved

The major requirements is a highly talented full-time person, plus backup staff (depending on complexity of the situation), with the potential to be respected by all parties in the process. Talented specialists able to play this role will probably be earning between $20,000 and $30,000 per year.

ENDNOTES

1. The principal source for this chapter is Authur D. Little, Inc., Effective Citizen Participation in Transportation Planning (Washington, D. C.: Federal Highway Administration, 1976).

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Coordinator and Coordinator/Catalyst

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CHAPTER 16. SUBAREA STRATEGIES[1]

ADVOCACY PLANNING

Description and Function

Advocacy Planning, a term derived from the legal profession and accredited to Paul Davidoff, is a process in which an affected group of citizens, outside the formal decision-making structure, directly employs or utilizes independent professional assistance to advance and protect its interests in a planning process.

Advocacy Planning emerged as a response by professionals to the needs of the urban poor and a concern that the interests of these citizens, generally excluded from an official planning process, be represented and articulated in urban renewal, housing construction, highway and model cities program planning. Conceptually, Advocacy Planning then implies a commitment to a public with specialized needs and is a departure from the traditional planning concept of a single plan that serves the general good.

In a pure model of Advocacy Planning, the citizen group, either with private funds or funds made available by the public agency for this purpose, contracts for the professional skills of physical planners, social planners, and lawyers, as needed. The advocate planners are directly accountable to their clients and serve their interests in:

. Developing alternative proposals;

. Dealing with the public agency and other official systems;

. Reviewing and evaluating the technical plans of the agency for their impact on the clients' objectives and priorities.

The responsibilities of the Advocate Planners may include a wide variety of activities, including but not limited to organizing, educating, data-gathering, analyzing, planning, negotiating, and politicizing, all within the scope of protecting, interpreting and advancing the interests of the client group. In carrying out these activities, advocate planners play many roles; a primary role, however, is that of technician for the citizen group, representing the citizens in dealing with official agency technicians. The advocates work directly with their clients in carrying out their responsibilities.

In contrast to this pure model of Advocacy Planning which is characterized by a direct client-professional relationship, in another model of Advocacy Planning the agency employs planners to work directly with neighborhoods or interest groups providing them with technical assistance and advocating their interests. This approach may be accompanied by the provision of decentralized quarters for planning "field office" (Biblio Ref. 5), "little city hall", or "community planning center."

Positive Features

Advocacy Planning brings citizens directly into the planning process, exposing and educating them in the technical aspects of the process, thus deflating planning mystique and mythology. It creates parity between the citizens and the agency professionals. With their own professional assistance, citizens have the opportunity to examine issues and goals from their own perspective, unencumbered by the constraints and perceptions of the agency. Advocacy Planning provides a check and a balance for the value-sets, assumptions and data from which the agency operates. The process stimulates communication and interaction between the local group and the agency, and provides a mechanism for incorporating citizens' interests in the final agreed-upon plan. The exposure and experience in the planning process may offer a career opportunity for some citizens who develop the skills to serve as paraprofessionals in the community.

Negative Features

Pure Advocacy Planning is a highly political technique directed toward a redistribution of power and resources. Inasmuch as it implies opposition of contending views, it tends to be an adversary process in which actors and issues are polarized, inhibiting open communication and opportunity for consensus building. To the extent that the planning elements are highly technical, advocates may be a minority voice; not representative of the group, community or interests they purport to speak for. The advocate planners may be subject to the charge by the citizen group of not representing the group's values and manipulating the group. This charge is heightened when the planners promote community resistance to compromise and negotiation. When the advocate planners are employed by the agency, they may be subject to role confusion in their accountability to the agency as their employer and the citizen group whose interests they have been asked to represent.

Potential For Resolving Issues

Conflict and controversy frequently develop, as values and assumptions are challenged by citizens, but communication between citizen groups and the agency can lead to negotiation, producing changes in perspective on both sides, and possibly a redefinition of goals. Compromise and tradeoffs are essential elements in arriving at agreement on a final solution.

Program Utilization

Advocacy Planning has been used in Model Cities programs in such cities as Philadelphia, Oakland, New York, and boston. Urban renewal programs in a number of cities have included Advocacy Planning, as have some highway planning programs.

Costs Involved

Advocacy Planning can be relatively inexpensive or costly, depending on the range of professional assistance required, the project's scope, and time requirements. Cost items include professional salaries, reproduction of technical and public relations materials, mailing, meetings, office space with clerical support and often surveys and other forms of data gathering. Estimated-cost range is $20,000-$100,000 per year.

NEIGHBORHOOD MEETINGS

Description and Function

Neighborhood Meetings are held for the residents of a specific neighborhood, as opposed to open public meetings held for anyone interested and workshops which are usually designed for those parties-at-interest who are seriously concerned about a specific issue. (See also Workshops, Community-Sponsored Meetings, and Open Information Meetings.) In highway planning, these Meetings are usually held in a neighborhood that has been or will be affected by a specific highway plan or project, either at an early stage in plan formulation, or at a stage when the plans have been well-developed. These Meetings are among the most sensitive and difficult of any that will be conducted in a participatory process, for they will involve basic issues of whose property might be taken, who might have to move, how relocation might be handled, what arrangements have been made for compensation, what impacts on neighborhood property will occur, etc.

Depending on the time a Neighborhood Meeting is held in the highway planning process, the Meeting will tend to have very different characteristics. If held early in the process, when the question of corridor location has not been resolved and the alternatives both to location and/or mode of facility are still open, the character of the Meeting will usually allow for exchange of information--questions, answers, recommendations, statements of concern, etc. Neighborhood meetings held early in the process provide the planners with valuable neighborhood-based perceptions of the impacts, and enable the planners to consider alternative options which might be more equitable, less disruptive and/or more beneficial to the affected neighborhoods. If the Meeting is late in the process, after a decision has been made about the nature of a specific highway improvement, then the Meeting will have a different character--usually concentrating on protests and hostile questions about how and when the agency plans to undertake various procedural steps.

Neighborhood Meetings can be initiated by the transportation agency or by neighborhood groups. Both can be instructive to the planners' education about the community, its life styles, and its sectors of concern.

To plan an effective role in a participatory process for highway and other transportation planning, Neighborhood Meetings should be held as early in the process as transportation corridors or facility locations are even tentatively identified. In the past, the credibility of the transportation planning process has been seriously jeopardized by the practice of holding Neighborhood Meetings to inform residents of impending projects only after much of the technical and design work has been completed and many decisions have already been made.

Under such circumstances, Neighborhood Meetings often were viewed with resentment by the affected neighborhood groups, for they were, in effect, told what was going to happen and offered little, if any, opportunity to change the result. In a participatory process, Neighborhood Meetings should be held early and often to allow affected residents, who will normally be the interest group most directly affected, the opportunity to react to the planning throughout the entire time span of the program. If the plans and programs can be changed to accommodate the wishes of the neighborhood identified at these Meetings, the participatory process will have paid off handsomely. In planning for Neighborhood Meetings, the following factors come into play:

- Identification of the neighborhoods likely to be affected by the transportation planning process and/or specific projects emerging from the process.

- Identification of the groups and organizations (official or unofficial) active in the neighborhood.

- Preparation for conducting Neighborhood Meetings--this will usually require having a great deal of specific neighborhood-oriented information available to the agency person handling the Meeting or participating in a Meeting to which the agency has been invited.

- Advance preparation with information on questions likely to be asked by affected residents and graphic displays which help lay people understand the significant technical information.

- Identification of agency staff who are technically up-to-date and adept in interpersonal relations.

- Follow-up--communication of results of Meetings and arrangement for subsequent meetings.

Positive Features

Neighborhood Meetings in the affected communities, if organized early in the process and continued on through final decisions, will go a long way toward improving the credibility of the planning process, particularly if the agency or planning staff participants are honest, open, and responsive through the course of these Meetings. If efforts are made to hide plans that might receive negative reaction, or to not "come clean" with a proposal, or if there is no willingness to listen to the neighborhood's concerns and try to incorporate them into the planning that is done, then the whole process is likely to flounder. If, on the other hand, these Meetings are conducted honestly and willingly, the chances are more likely that the planning process will succeed. Frequently, such Meetings help to dispel rumors and surface the fact that some neighborhoods welcome a proposed improvement. If the neighborhood can see how it gains from a proposed project, the chances of the whole program getting widespread support are improved. For a technical planning staff, such Meetings often produce information on facts, values, and alternatives that are worth serious consideration.

Negative Features

Neighborhood Meetings may be exceedingly difficult to operate and participate in from the point-of-view of the responsible planners, project managers, and officials, depending on the nature of the issues on the agenda. If the proposal being discussed is something the neighborhood welcomes, a Meeting should go well. If the proposal is something the neighborhood does not want, a meeting will probably be difficult for both the planners and the neighborhood residents. On the part of those responsible for policy or program planning, these meetings may require a higher level of preparation and a more detailed type of information than required for other types of Meetings. The chances for misunderstanding and disagreements, and resulting unpleasantness, are very high.

Neighborhood Meetings are generally held at night; thus, if a schedule is not carefully thought through, planners may find themselves so busy attending meetings that they will be unable to complete their assignments. If Neighborhood Meetings are organizationally based, planners should note that they have not reached the unorganized sectors of the community.

Potential For Resolving Issues

Potential is relatively high if serious consideration is given to neighborhood values, views of impacts, alternatives, etc. Potential is low if the Meetings are held after the fact; if agency staff are inept in handling legitimate concerns; or are perceived as insensitive to neighborhood issues.

Program Utilization

Neighborhood Meetings are a feature of almost any public program that impacts on a neighborhood--notably the Model Cities, urban renewal, code enforcement programs of HUD, OEO programs, HEW's neighborhood-oriented programs, etc.

Costs Involved

The costs are relatively small involving predominantly staff time and graphic displays. In some cases, additional costs may be incurred for rental of the meeting facility or clean-up services.

NEIGHBORHOOD PLANNING COUNCIL

Description and Function

A Neighborhood Planning Council, a locally-based organization, is a technique which permits citizen participation in the decision-making process on policy and planning issues affecting their immediate geographic area. The council serves as an advisory body to all public agencies in identifying neighborhood problems, formulating goals and priorities, and evaluating and reacting to the agency's proposed plans.

PLANNING COUNCIL

The Neighborhood Planning Council structure came into wide use in some OEO-sponsored, Model Cities and urban renewal programs. In urban renewal projects, the councils are more frequently called Project Area Committees or Councils. Establishment of the neighborhood-based programs creates the opportunity for citizens most directly affected by them to participate in planning for their immediate neighborhood. The model has been adapted in some large cities as part of a decentralized approach to local government planning activities, e.g., New York City's Planning Commission has now decentralized its planning functions to 59 community districts.

Members of a council are usually democratically elected or appointed by the agency and serve on a voluntary basis, but may receive reimbursement of expenses and honoraria. Technical assistance for the council is generally provided by the city or county's professional staff. For some specific planning tasks or policy issues, an agency may allocate funds to the council to contract for their own technical assistance, or the agency may employ special professional staff who are assigned to work with the council.

The purview of the council is the neighborhood, identified either by established political or geographical boundaries; however, the issues or plans before the council are usually a discrete component of a larger planning effort, such as a city or county policy plan or comprehensive plan. Conceptually, the Neighborhood Planning Council reflects some of the goals of neighborhood government; however, since the council is an advisory body only, it is not a response to neighborhood control or neighborhood government models. The final planning and policy decisions rest and remain with the city or county officials.

Positive Features

Establishment of a Neighborhood Planning Council allows citizens in a local area the opportunity to bring their values and interests to bear on decisions which have an immediate effect on their neighborhood. The potential immediacy of impact enhances citizen motivation for participation, and members' identification with the neighborhood promotes communication and interaction. Though the membership may be diverse, the council's focus on the neighborhood permits participants to work effectively without being distracted or diverted by city-wide issues. Working in concert with the staff professionals on a continuing basis, the citizens become more experienced with the technical aspects of planning. For the public agency, the council provides timely feedback on proposed plans and allows for early identification of problems and issues. The council can represent and articulate to the wider community the agency's goals and the particular issues at hand. With adequate staff supervision and direction, the council can assist the agency in some planning tasks, such as surveys.

Negative Features

Operating on a neighborhood base removes the affected citizens from direct and regular interaction with the central agency's decision-makers. In this situation, interaction with the decision-makers is likely to occur primarily in controversies and conflicts in which the agency is then perceived as an adversary. In large geographic areas which necessitate organization of several Neighborhood Planning Councils, the council may compete against the contending interests represented by the other councils and may lose sight of those planning issues which cross neighborhood boundaries, e.g., air pollution, housing, economic development. Time-consuming planning efforts and the lack of an active role may discourage consistency in membership and attendance. Since the authority of the council is strictly advisory, the final agency decision may not reflect the priorities of the council, leaving participants frustrated and resentful. The Neighborhood Planning Council tends to attract the most vocal and articulate citizens; if it is not really representative of the neighborhood, it may be viewed by other citizens as a barrier to participatory efforts by the unrepresented sectors of the community. The council is dependent on the agency for valid and accurate information, as well as technical assistance, creating an opportunity for cooptation and manipulation by the agency.

Potential For Resolving Issues

The council represents a good mechanism for resolving neighborhood issues if both the agency staff and the council members are motivated to resolve them. Through persuasion, negotiation, and trade-offs, the council can arrive at consensus. The council's input can also bring about a change in perspective or a redefinition of goals by the agency.

Program Utilization

Decentralized Neighborhood Planning Councils are currently utilized for all aspects of city planning in New York. Neighborhood Planning Councils have been utilized as a structure for citizen participation in OEO-funded community action programs, health planning and health centers, and some legal assistance programs. Model Cities and Planned Variations programs in numerous cities have used neighborhood councils, established within the Model Cities area.

Costs Involved

Costs involve professional staff time and consultant resources spent with the council, reproduction of materials, mailings, meeting space, and clerical support. Establishment of several Neighborhood Councils within an area or region can be expensive in terms of an agency's need to hire a large number of additional staff.

COMMUNITY TECHNICAL ASSISTANCE

Description and Function

Community Technical Assistance is a technique which enables citizens effectively to develop positions on the planning issues at hand. The theory of technical assistance stems from the view that the group which has access to qualified and empathic technical assistance will be better equipped to participate in the technical process of a planning operation, and will have a major influence on resulting decisions. By having access to technical expertise, citizens who may approach problems and issues from a different value-base or point-of-view would be closer to parity with agency staff in making recommendations, and press for their merits before the decision-makers.

As a concept in local planning, technical assistance developed from the objections of community organizations to the "closed" technical processes of most planning agencies in which the data and information developed by agency and/or consultants to support plans presented to the decision-makers (and used by them to arrive at decisions) were not available (or were not comprehensible) to the community organizations. These decisions were often presented to the affected communities and the general public with the "facts" developed by the technical process providing the prime rationale for the decision. The affected communities would often view the "facts" in a completely different light than the agency, and might also tend to consider other information, either not presented or not given prime attention, as being more important to the decision. Technical assistance was designed to provide interested groups and organizations with help, so that they could develop their own technical information and also develop and present their own alternatives.

Technical assistance can take a variety of forms:

. The technical staff of the official planning agency can provide technical assistance as part of their regularly assigned functions.

. The official planning agency can designate special staff, possibly selected by the community group, assigned to provide technical assistance to the group requesting it.

. Assistance in the form of funds can be provided directly to a group to hire their own independent consultants or staff to help them undertake their own studies independent of the official planning process. (See also Advocacy Planning).

. Outside groups and organizations can arrange for their own independent technical assistance through independent funding sources or recruitment of technically qualified volunteers, such as students and faculty of universities, pro bono consultants and lawyers. (See also Community Planning Center.)

Positive Features

Good technical assistance makes it possible for citizens to grasp the complexities of the planning process and the technical issues involved. When the official planning agency is willing and able to provide technical assistance to the community group on a basis the group can accept, the assistance helps to develop trust between the planning agency and the citizen group, even when there are disagreements on policy and programs. The planning process, and the quality of the dialogue, is enhanced when trusted technical assistance is provided. It creates opportunity for early identification of issues and problems, and regular feed-back for the agency as planning develops. Working directly with professionals and exposed to the technical aspects of planning, citizens develop greater appreciation and understanding of the planning process, its constraints, and its opportunities.

Negative Features

When the assistance is provided by the planning agency, it can divide the loyalties of the agency's technical staff -- i.e., those staff assigned to work with the community group may be placed in conflict about whether they are accountable to the citizens group(s) or the agency. If the agency staff is not fully committed to the technique, the staff may withhold information from the community group or attempt to coopt them to the agency's point-of-view and interests. If technical assistance is only provided to those groups which are most active and vocal, the results of the participation could be biased in their direction, and other groups with equally legitimate interests could be left out. Provision of technical assistance can be a significant drain on the resources of a planning project. In some communities, agency-based technical assistance may be distrusted by the citizens as a result of past experiences which were negative; in such cases, independent technical assistance may offer a more effective method for interaction. (See Advocacy Planning and Community Planning Center.)

Potential For Resolving Issues

High-quality technical assistance enhances the possibility for resolving issues. The dialogue between the community group and the planning agency can lead to negotiation, trade-offs, compromise, as well as changes in perspective on both sides and a redefinition of goals.

Program Utilization

Technical assistance was required in all Model Cities programs. It has been provided to local communities by many State planning agencies as the Department of Community Affairs in Massachusetts, and the Urban Development Corporation in New York. The technique has also been used in many urban renewal, Headstart programs and comprehensive health planning projects. In transportation planning, community technical assistance has been provided in highway planning in the New York City Westside Highway Project, in the Boston Transportation Restudy Project, and in several California location studies.

Procedure

See Advocacy Planning and Community Planning Center.[2]

Costs Involved

Costs vary, depending on the complexity of the community and the technical issues involved. They involve professional staff or consultants assigned to work with the community group, additional office space, clerical support, and the reproduction and distribution of materials.

ENDNOTES

1. This chapter is drawn from Arthur D. Little, Inc., Effective Citizen Participation in Transportation Planning (Washington, D.C.: Federal Highway Administration 1976) and Douglas C. Smith, Robert C. Stuart, and Robert Hansen, Community Involvement in Highway Planning and Design (Washington, D.C.: Federal Highway Administration, 1975).

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CHAPTER 17. AN INFORMED PUBLIC[1]

OPEN INFORMATION MEETING

Description and Function

Open Information Meetings are usually designed to present technical information, planning proposals, or details about a specific work program or project to the general public prior to or during the period of work. In the context of public works planning, open information meetings would usually refer to general meetings held at the beginning and during the course of work on a specific project or a more general policy planning program, as opposed to a formally required public hearing which is usually held at or near the end of the process.

Unlike Neighborhood Meetings or Community-Sponsored Meetings held for citizens of a particular area or particular constituency or membership, the open meeting is designed for and open to all interested parties--individual citizens, groups, etc.--and is usually widely publicized through a variety of methods. Characteristically, the meetings feature a presentation by a program manager or senior technical specialist of a broad range of items being worked on--the work program, processes, alternatives, impact, and the basic issues involved in the program or proposal. A second characteristic feature is an extensive question-and-answer period in which citizens have the opportunity to interact with the agency staff. Reactions to proposals or ideas are sometimes solicited through a show of hands or other informal polling methods. (See also Meetings - Community-Sponsored, and Meetings - Neighborhood.)

Positive Features

Open Information Meetings provide a forum for information exchange between citizens and agency representatives. They are useful in eliciting a generalized level of reaction to proposed agency plans. When meetings are held at the beginning and during the course of work on a specific project, citizens are more apt to have confidence that their reactions are genuinely being sought by the public officials. Their confidence is increased when open meetings are held in a series over time, and the constructive comments made by citizens at one meeting are reflected in revised ideas or proposals at subsequent meetings held during the planning process. Citizen reaction early in the process, and on a continuing basis, can signal potential problems and issues before a heavy investment in any one approach is made. Open Information Meetings are particularly useful for identifying citizens who are interested in more serious levels of interaction with the agency and other parties-at-interest.

Negative Features

Open Information Meetings are limited to an information exchange; they are not a suitable occasion for negatiation. At meetings with a large number of people representing a variety of interests and positions, it is usually difficult to focus attention on any one specific issue for any length of time so that a full exchange and understanding of views can be fully developed. More articulate and better prepared citizens tend to dominate the question period to the frustration of others. The meetings require skill and sensitivity in their chairing and planning logistics, as well as the preparation of visual aids and written material. When the agency staff is inadequately prepared or not skilled in open meeting dynamics, their response to difficult questions and their reaction to hostility or anger on the part of some citizens can backfire, turning the audience against them.

Potential for Resolving Issues

Open Information Meetings may be valuable in exposing points-of-view and recommendations of the various parties-at-interest to one another and to the public agency, but they are not usually useful in resolving conflicts because of their size and pattern of communication.

Program Utilization

Open Information Meetings are a common device in any public program where citizen participation is involved. They are widely used in many development programs, in addition to the highway program, urban renewal, Model Cities, public works projects like airport development, and others. They are also very often used in connection with such community development issues as zoning changes, land use planning, school and parks planning, and others.

Costs Involved

Costs per meeting can vary widely depending on the content, preparation required, and number of staff needed to be in attendance. Included in the costs are the meeting place, public advertisement of the meeting (newspaper notices, radio and TV spots, etc.), mailings, preparation of visual aids and hand-out materials, and, frequently, refreshments for meeting breaks.

HOTLINE

Description and Function

"Hotline" is the term given to a telephone-answering system in which a caller is able to telephone in a particular question or complaint, and receive a personal response or sometimes, a recorded announcement. The objective is to provide an environment where community members can easily lodge complaints; to provide the agency staff with a preliminary indication of adversely affected groups; and/or to disperse messages and information to the public about meetings and events. The Hotline is an "easy-to-remember" telephone number which is circulated to the public at large through community meetings, radio-TV spots, advertisements in a local newspaper, newsletters, etc. For State and regional agencies, the Hotline number is usually toll free to facilitate its use by the public.

Hotlines have been used in several different ways:

. To record and distribute specific pieces of information, such as the time and place of public hearings scheduled, the name and phone number of specific staff to call for different types of information, etc. In this instance, the caller dials the number and receives a tape-recorded message on the information being sought.

. To respond to straightforward inquiries about a transportation plan or planning process, such as "where will the meeting be held," or "at what intersection will the interchange be located." In this instance, the Hotline is usually manned by public information staff of the agency who answer questions on the basis of a wide variety of resource information at their fingertips, or are able to obtain answers to unanticipated questions from other staff.

. To record public inquiries/complaints and the telephone number of the caller. At various intervals during the day, a staff member listens to the taped messages, transcribes them, researches the information being sought, and then returns the call with the desired information. In the case of complex queries or complaints, the telephone call is returned by the technical staff person most knowledgeable about the issue.

Positive Features

A Hotline creates ready access to information available to anyone who has access to a telephone. Since Hotline service, in most instances, is open 24 hours a day, it provides the point of contact to citizens at times that are most convenient to them. If the number of calls and the substance of the calls are tracked and analyzed, the agency has an additional indicator of community interest. By providing toll-free service for large geographic areas, the agency is facilitating citizen feedback.

Negative Features

A Hotline, by itself, cannot be considered a participatory process. More often, it is an information-dispensing device which provides specific limited pieces of information, and answers to simple direct questions. One of the biggest difficulties with Hotlines is that the staff person assigned frequently lacks the information that is being requested, and reacts defensively or insensitively to complaints from citizens. When this occurs, the Hotline is perceived by the citizen as an additional barrier between himself and the technical staff.

Potential for Resolving Issues

The Hotline is severely limited as a device for resolving conflict or potential issues. It is a participatory tool only in the broadest sesne that anyone can use it to find out how to participate more actively, or to get specific information about a project or a plan.

Program Utilization

While it is known that various transportation agencies use Hotlines, there is virtually no literature on the subject. In most major cities, Hotlines have been used to provide information about time, weather, stockmarket, airline schedules, cultural events, etc. In addition, various public agencies have employed the technique for crisis counseling on social problems, such as suicide, alcohol, health, child runaways, etc.

Procedure

Note: Do not confuse this technique with a technique sometimes called "Hotline," "Listening Post," and "Electronic Issue-Ballot Workshop" which attempt to build consensus and determine public reactions to particular issues. In contrast, the technique described below is designed to achieve the objective outlined above by using a telephone recording and/or interactive system.

Step (1) Determine the specific objective to be achieved through the Hotline.
  (a) If the objective is to provide up to date information on meeting and events, then a mechanical recording system will be adequate.
  (b) If the objective is to answer questions or handle complaints then a recording system and/or staff managed phones will be sufficient.
  (c) If the objective is to inventory possible affected groups while responding to complaints and answering questions, then staff must be employed to answer phones.

(b) If the objective is to answer questions or handle complaints then a recording system and/or staff managed phones will be sufficient.
(c) If the objective is to inventory possible affected groups while responding to complaints and answering questions, then staff must be employed to answer phones.

Step (2) Contact the local phone company for information on choosing a phone number (it should be easy to remember) and on installation charges. Determine where the phones will be located (in a small room, in the central agency office, etc.) and have the phones and/or recording systems installed.

Step (3) Depending upon the objectives established in Step (1), hire the needed staff people.
(a) If the objective is to distribute information, then only one person will be needed to record messages. The person chosen should have a pleasant voice and should be able to pronounce words and phrases clearly.
(b) If the agency wishes to respond to questions and complaints of citizens, then it can either:
  (1) record questions and complaints and respond to each by letter, or
  (2) answer each question and respond to each complaint as community members call in.

In the first case, only one person is needed to record a message asking each caller to leave name and address so that the agency can return by letter. This technique is dangerous to use because seldomly will people leave their names and addresses when registering complaints. Also extra staff are needed to respond to letters.

In the second case several people will be needed to operate the phones and answer questions. Unless there is someone there at all times who can answer any questions and who can react to irate citizens without becoming irate himself/herself, the technique is not very useful to citizens or the agency.

(c) If the objective is to inform citizens, to respond to questions and complaints, and to gain insight into possible affected groups, then the phones must be operated by a small staff. In this situation, the staff asks questions of the caller as well as answers caller questions. Questions asked by the agency should probe the person's background and interests (e.g., What is the closest street intersection near your home?, Do you belong to any community groups and/or agencies which might share your views?, etc.). No more than three questions should be asked and each question should require only a short answer. If the person asks why these questions are necessary, be candid and explain the purpose (e.g., "We are attempting to find other people who might have similiar interests and/or opinions as you do. Then, perhaps we can organize small meetings where people with similiar interests as you can get together and discuss issues"). Questions are responded to and complaints registered. Each caller should be encouraged to tell his/her friends about the Hotline.

Step (4) It is very important that the public be informed of the Listening Post's existence (use Major Group Objective IV). The public should know:
(a) the specific function of the listening post which is determined in Step (1),
(b) the number to call, and
(c) the hours at which to call.

Step (5) Evaluate the effectiveness of the Listening Post (HOT LINE) by:
(a) taking busy counts, (This is done by the phone company to determine peak hours of use and effectiveness of the lines),
(b) counting the number of calls which come in, and/or
(c) direct/survey of the public by phone (Technique I/F)

Costs Involved

Hotline is an inexpensive tool. Appropriately, major costs are $40 for installation, plus $25 per two hours of recording service for recording equipment, and $50 installation, plus $185 per ten hours of regional toll-free service. Other costs involved may include general advertising of the Hotline number and salary for the staff who answer the line.

PUBLIC INFORMATION PROGRAMS

Description and Function

Public Information Programs are designed to provide the general public with information about a particular program or proposal. They range from programs which carry the aura of promotion of a position, or selling of an idea, to neutral presentation of essential information. In policy planning and implementation information programs can involve dissemination of both technical data and analysis and presentation of general and specific plans, proposals and projects. Public information techniques would usually be used as part of a continuing, regular program, rather than undertaken on a one-time basis. (See also Hotline, Open Information Meetings, Citizens Training, and Drop-In Centers.)

Public Information Programs can employ a variety of tools and techniques. Among the most commonly used are:

. Press releases and feature stories to note specific events or present significant information coming out of a planning program.

. Direct mail for distribution of various types of material, each designed for a specific purpose, such as general education and information, or an invitation to a meeting or exhibit, or fact-finding through an invitation to respond. The material may be presented in the format of a newsletter, an editorial, brochure, fliers, or an information bulletin.

. Radio and TV public service programs and talk shows for spot announcements of a meeting or exhibit; speeches and debates to air issues and provide general information. Talk shows offer citizens opportunity to interact with agency staff, though the number of citizens who can participate is very limited.

. Displays, slide presentations, documentary films, videotapes, and other visual material for use in connection with talks, either given by those involved in the planning program, or loaned to interested outsdie groups.

. Exhibits which can be set up in convenient public locations for general viewing.

. Legal notices and paid advertisements.

. Responses to inquiries from the public.

Positive Features

A well-conceived and implemented Public Information Program can provide information fast and efficiently, particularly when the technical information is translated into terms understandable to the non-technician. By using a variety of imaginative tools and techniques, the agency can reach large numbers of citizens, and, in many instances, it is only through public information efforts that some of the parties-at-interest have the opportunity to get relevant and accurate information about the program. A Public Information Program is usually essential to insure that other participatory techniques, e.g., public meetings receive the publicity they need to be successful.

Negative Features

Public Information Programs are generally one-way communication techniques and do not allow for citizen interaction with the planning agency. If the information is too technical or too agency-oriented, it can raise suspicion about the commitment to an open participatory process. Also, if the citizens feel that they are being bombarded with publicity, their suspicion about the agency's motivations is aroused. Operating alone, a Public Information Program can insure only a minor amount of direct public involvement in a planning program, but, in concert with other techniques, it becomes an essential ingredient.

Potential for Resolving Issues

Public Information Programs can raise issues involved in a planning program, but they have no potential for resolving them, since they are a one-way form of communication.

Program Utilization

Public Information Programs are used in most public programs, including highway and other transportation planning, Model Cities, urban renewal, health planning, etc.

Procedures

Using Mass Media

Step (1) Consider, first of all, what messages are best presented through mass media. Consider the following points when deciding whether or not to use mass media for message delivery:

- (a) Define the purpose of the message. Most messages presented to the public should be quick and concise. Ask whether or not the objective of the message can be achieved in short series of statements.
- (b) Determine what groups and how many people should receive the message. Will mass media messages be necessary to reach one group or one community?
- (c) Ask whether or not the subject is of interest to the public. If it is, ask how to inform the listener that the message is of interest to him/her.

Step (2) Establish a good working relationship with media personnel. The importance of this step in order to insure proper and adequate media coverage cannot be over-emphasized. Several procedures ought to be considered when attempting to fulfill this step:

- (a) Search the highway agency personnel for a staff person who is familiar with a media employee. Initial contacts should be made by highway persons who are acquainted with media people in order to determine who in the media staff(s) might be contacted in the future.
- (b) Establish an in-house agency task force which is responsible for developing and maintaining good public relations with the media. This task force should be responsible for monitoring the media, thereby keeping abreast of public (or media) attitudes towards the agency. (See Technique I/D).
- (c) Establish a good credibility with the community by utilizing "reach out" techniques such as opening project files (Technique IV/H), operating field offices (Techniques I/L, or II/F), operating listening posts (Technique I/G), etc. Such techniques encourage media sources to announce highway community involvement through free "Public Service Announcements".
- (d) Make frequent contacts with the media, but only when the agency has pertinent information to provide. Media staff persons will often facilitate special interests _if_ those interests can provide information which the public can use. Do not contact media source too frequently or with insignificant information so that it appears (to the public _or_ to the media) that the agency is "mining and dining" the media. This can hurt the image of the agency eventually.

Step (3) Sometimes it is necessary to produce materials and news items for the media. When this is necessary, it is important to utilize guidelines for letter-writing and for utilizing audio-visual aids outlined in Appendix 2 and Appendix 4 respectively. Place Special emphasis upon:

(a) Providing enough background information for the message to be clearly understood (do not make message too technical);
(b) Separating facts from opinions (and not making opinions without fact), and
(c) Presenting two sides of an issue when an argument is being presented (the message becomes more believable).

Step (4) Be sure to back media messages with other information sources. Newsletters or pamphlets provide adequate media-message follow-up. It is important to back-up messages with action. All the work that goes into establishing good agency credibility will be worthless if that agency is unable, or unwilling to follow-up its promises or statements with commensurate action.

Developing A Mailing List

Step (1) Identify key people and community group leaders (see Major Group Objective I). Keep the preliminary mailing list short and limited to these key people.

Step (2) Personally interview these key people expressing the agency's purpose and good intentions. Ask from them names of community members who might be interested in receiving agency information. Also inquire where the agency might acquire community club rosters or charters which might aid in developing a mailing list.

Step (3) From the sources given by identified key people and community group leaders and from any other available sources (telephone directories, etc.) develop another mailing list. Construct a form letter which will be sent to these people and which announces the project under consideration or coming events or meetings. Do not express agency points of view in an initial mailing. This will be obvious to a reader and expressing opinions at first contact is not a good way to develop a good relationship. There will be other times when the agency will have the opportunity to express views through the mail.

Step (4) At meetings, through field offices, or any other location where the agency is in direct contact with the community, ask that people sign their names and addresses so that the mailing list continue to grow and so that personal contact with the entire community becomes possible.

Step (5) As the list becomes large, develop several mailing lists, each list having a specific purpose. For example, develop a list of people who have outwardly shown enthusiasm to a project and who might be possible candidates for a task force, or who might be able to indicate the community's attitudes towards a project. Or, develop a list of names of people who should be sent all information concerning a project (e.g., most impacted groups, etc.).

Step (6) There are several guidelines that an agency should follow when writing letters (see Appendix). These guidelines should be followed when writing letters so that unnecessary confusion or conflicts might be avoided.

For Producing Brochures, Pamphlets, or Newsletters

Step (1) Determine what it is that must be stated. Specifically outline the information that will transpire and the purpose for this information (i.e., what is the objective sought?)

Step (2) Based on Step 1 determine the most appropriate means of presenting this information. Brochures and pamphlets are most appropriate for presenting lengthy material which is sent out to specific groups, individuals, or other agencies. Newsletters or posters may work best when presenting small amounts of information or when presenting small amounts of information or when the purpose is to grab attention and announces an event.

Step (3) Once a method of presenting the information has been chosen, contact other agencies (transportation or others) which have sent out newsletters, pamphlets, posters or brochures in the past. Obtain these examples, if possible, so that some of the visual or message ideas might be used. Ask the agency to evaluate the effectiveness of each; also ask that they explain why a particular idea might have been successful or unsuccessful.

Step (4) Organize a theme for these announcements and write them up. Information presented should pertain only to the subject. Do not include unnecessary information. The information item should invite reading at a glance. This is not easily done and some general principles follow:

(a) Don't use graphic ideas that are familiar to everyone. They are the most easily ignored messages.
(b) Make the message relevant to the reader in his/her environment. Be emphatic with readers and attempt to see things through their eyes. Ask whether such a message will anger or enlighten the reader from their perspective.
(c) Do not make illustrations or messages over complicated or too technical. Strive for simplicity.
(d) Provide humor whenever possible.
(e) Do not make promises that possibly cannot be fulfilled. This consideration is critical.

See Appendix 4 for more detailed information on organizing visual information.

Step (5) Determine where and when this information will be presented. Distribution methods are important and the efficiency of these information dispersing devices is often dependent upon adequate distribution. When posting notices, it is not often a good idea to post things where people are not waiting. Door locations are generally not efficient (people do not stand in front of doors). Crosswalk intersections, buses, windows where lines are likely to form, and other "waiting" places are likely to be most effective.

Step (6) As with other techniques, make sure that the process, once begun, continues. Community members may not receive "start-then-stop" information well. It is, therefore, a good idea to continue posting or sending out notices even though there may be little information to convey.

Costs Involved

Public Information Programs can be expensive, depending on how elaborate the program becomes. Costs include preparation of mailing lists, reproduction of materials, mailing, and considerable staff effort in translating technical information for general public consumption, contacting the media, and making specific arrangements for implementing the various techniques and tools employed.

ENDNOTES

1. This chapter is based on two reports available from the U.S. Federal Highway Administration, Washington, D.C.: Arthur D. Little, Inc., Effective Citizen Participation in Transportation Planning, 1976, and Douglas C. Smith, Robert C. Stuart, and Robert Hansen, Community Involvement in Highway Planning and Design, 1975.

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